RS1
D794
53

Drug & Cosmetic INDUSTRY

December 1943

THE UNIVERSITY
LIBRARY
OF GEORGIA

1944
JANUARY 1944
FEBRUARY 1944
MARCH 1944
'44—and the FUTURE
Business accepts as fact, that the future belongs to those who prepare for it. Most of us intend to prepare; the difficulty is, that we fail to convert our intentions into definite action, due perhaps to pressing current problems that take up so many working hours.
If your plans for the coming year include the consumption of any of our products, we suggest that you convert these plans into commitments at the earliest possible moment so that we can arrange our manufacturing facilities to fulfill your requirements. Here at Industrial Chemical Sales we have worked hard—and long during 1943 to produce a goodly supply of our products and we will keep at it just as diligently during the coming year.
Snow Top
PRECIPITATED CHALK
Abietic Acid ★ Nuchar Activated Carbons ★ Liquid Caustic Soda ★ Chlorine ★ Lignin ★ Ligro Crude Tall Oil ★ Indusoil ★ Distilled Tall Oil ★ Tall Oil Pitch ★ Sulphate Wood Turpentine
INDUSTRIAL CHEMICAL SALES
DIVISION WEST VIRGINIA PULP & PAPER COMPANY
230 PARK AVENUE NEW YORK 17, N.Y
35 E. WACKER DRIVE CHICAGO 1, ILLINOIS
748 PUBLIC LEDGER BLDG. PHILADELPHIA 6, PA
844 LEADER BLDG. CLEVELAND 14, OHIO

The possibility that African ports may be shortly opened to American commerce makes C. A. P. P. once again of great interest to American consumers of essential oils and perfume materials.

This company is established in various parts of Africa with large plantations and modern distilling and extracting plants. Laboratories and plantations are at Meknes and Marrakech (Morocco), Labbé-Nadel (French Guinea) and Nossi-Bé.

Products of C. A. P. P. are:-

ABSOLUTES	Karo Karounde, Oak Moss, Mimosa, Rose Morocco, Ylang Ylang Nossi-Be.
OILS	Basil, Chamomile Morocco, Cedrus Atlantica, Geranium Morocco, Petitgrain French Guinea Bigarade, Lemon; Sweet Orange French Guinea; Ylang Ylang Nossi-Be.
TERPENELESS OILS . .	Cedrus Atlantica, Lemon, Sweet Orange.

NAUGATUCK AROMATICS

DIVISION OF UNITED STATES RUBBER COMPANY

254 FOURTH AVENUE • NEW YORK, N. Y.

14 N. FRANKLIN STREET, CHICAGO, ILL. • H. M. ROYAL, Inc., 4814 LOMA VISTA, LOS ANGELES, CALIF.

NAUGATUCK CHEMICALS LTD., ELMIRA, ONTARIO, CANADA

Sole Representatives for: BRUNO COURT, S. A., GRASSE, FRANCE C. A. P. P., CASABLANCA, MOROCCO

Drug & Cosmetic INDUSTRY

DECEMBER 1943

CONTENTS

KEEPING POSTED	621
THE INDUSTRY AND ITS CRITICS	626
RECONVERSION	628
ISOPROPYL AND ETHYL	629
PREVENTION OF INDUSTRIAL DERMATITIS	630
ALCOHOL TAX DRAWBACK	632
DRUG SUPPLIES AFTER TWO YEARS OF WAR	634
MEDICINE IN THE WAR	637
MERCHANDISING NEWS AND PACKAGING NOTES	639
NEWS	648
INDUSTRY'S BOOKS	662
PRODUCTION FORUM	665
PERFUMERS' SHELF	676
COMPOUNDER'S CORNER	679
ADVANCING THERAPY	685
PURCHASING DEPARTMENT	689
READERS' QUESTIONS	696

The Drug and Cosmetic Industry is published monthly by Drug Markets, Inc., Frazer V. Sinclair, President and Treasurer; Thomas R. Farrell, Vice-president and Secretary. Publication Address, 28 Renne Ave., Pittsfield, Mass., U. S. A. Editorial and General Office, 101 West 31st St., New York, 1, N. Y., U. S. A. Subscription price—$2.00 a year, in advance, Foreign Countries, $3.00. Single copies, 25¢; Back issues 50¢. Entered as Second Class Matter, January 1, 1928, at the Post Office at Pittsfield, Mass., under the Act of March 3, 1879.

Contents Copyrighted 1943 by Drug Markets, Inc.

Printed by Sun Printing Co., Pittsfield, Mass., U. S. A.

THOMAS R. FARRELL, Editor
ELMER SHEETS, Managing Editor
FRANCIS CHILSON, Production Editor
M. A. LESSER, Technical Editor
FRAZER V. SINCLAIR, Business Manager
C. R. KEELEY, Advertising Representative
P. W. ALEXANDER, Advertising Representative
WALTER M. BRAUNEISS, Advertising Representative
HARRY G. KELBLY, Circulation Manager
HILDA C. McCOLLOM, Art Director

Wedded to Uniformity

● TODAY SHE'S WEDDED to her man in uniform. But *every* day she's wedded to the idea of uniformity in her cosmetics . . . and meeting her demand for cosmetic uniformity is the only sound basis on which lasting product popularity can be built.

She can't afford to take chances with her complexion—*and she won't!* She may rely on your brand today to guard her loveliness, but unless you maintain the high quality that first won her favor, she'll change.

Standard Oil White Oils can help you hold her loyalty. Unvarying uniformity of the finished product depends on basic ingredients of highest quality, absolute purity, and complete dependability. And that's where Standard Oil White Oils really come through. They'll never let your products or your trade down. They can be an important factor in holding old customers and winning new ones.

Call your nearest Standard Oil (Indiana) office for information, prices, and counsel of an experienced representative. In Nebraska, call Standard Oil Company of Nebraska.

U. S. P. OILS

Stanolind Liquid Paraffin Heavy — Merusol White Mineral Oil
Superla White Mineral Oils
Saybolt Viscosities ranging from 85 to 345 seconds at 100° F.

TECHNICAL OILS

Superla White Rose Oil — Eureka White Oil — Extra White Rose Oil
White Rose Oil — Premier White Oil — Acme White Oil
Saybolt Viscosities ranging from 50 to 100 seconds at 100° F.

PETROLATUMS

Stanolene (the premium white petrolatum) — Stanolind Petrolatum Golden Topaz
Stanolind Petrolatum Snow White — Stanolind Petrolatum Topaz
Stanolind Petrolatum Lily White — Stanolind Petrolatum Amber
Stanolind Petrolatum Cream White — Stanolind Petrolatum Red Veterinary
Stanolind Petrolatum Dark

Also deodorized base oils for insecticide manufacture

Oil is Ammunition . . . Use it Wisely

WHITE OILS STANDARD OIL COMPANY (INDIANA)
910 SOUTH MICHIGAN AVE., CHICAGO, ILL.

STANDARD SERVICE

We're Busier than Ever

Delivering the Goods!

These are mighty busy times at the Allied Plant.

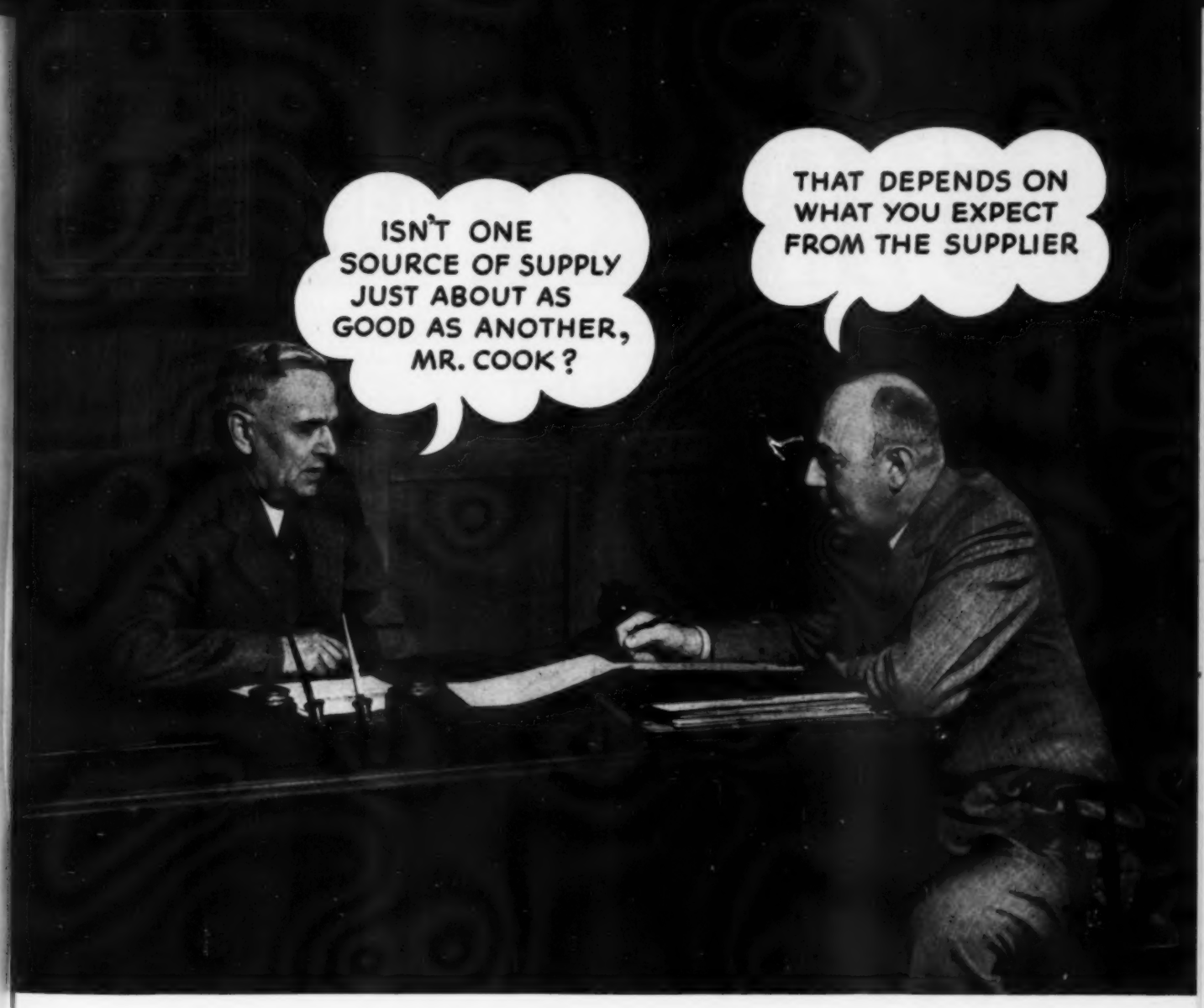
There are orders for the Armed Forces to be filled, also the orders of our customers who by their continued patronage and loyalty have earned a consideration we are privileged to honor. And these Civilian orders are mighty important orders, too, for they are playing their share in the vital role of sustaining a high morale on the home front.

Therefore, the servicing of *new* accounts in our present production schedule is not always physically possible. For this reason we urge that prospective clients talk over their requirements with us first to avoid possible disappointment and misunderstanding. Such discussion, to be sure, may not be a guarantee that their orders will be filled, but it is a guarantee of Allied fairness and willingness to consider your problem, and whenever possible, help you solve it.

ALLIED PRODUCTS, Inc. • 30 Rockefeller Plaza, N. Y. C.

Private Brand Specialists • Makers of the world's finest cosmetics and toiletries

Plant and laboratories • Suffern, New York • 1015 St. Alexander St., Montreal, Quebec



All of us in the glass container and closure industry do our best to make lighter, stronger, less expensive containers, and dependable, more efficient lower cost closures. Each company, to promote these improvements, spends in research and development as much as it can afford. And the efforts of all are, of course, commendable. But some companies succeed beyond others in improving products, lowering prices or bettering service. This may be because of extensive experience, large facilities, exceptional financial ability, or a strong insistence upon a higher manufacturing standard. When, as with Anchor Hocking, all these attributes are combined, that company is, obviously, better qualified as a highly desirable source of supply.

M. L. COOK, one of Anchor Hocking's ablest and most popular men, has been a member of the Anchor Hocking family for 17 years.

ANCHOR HOCKING

GLASS & CAPS

ANCHOR HOCKING GLASS CORPORATION LANCASTER, OHIO

INSIDE NEWS

DECEMBER PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1943

U.S. Tin Supply Depends Largely On Texas Smelter Constructed In The Nick Of Time

Young technician uses balance to determine amount of tin in slag after extraction from Bolivian ore. Laboratory control helps insure high metal recovery at Longhorn plant.

News of U. S. tin resources is now being made available through the heavy veil of censorship which shrouds this strategic metal.

Among many stories of unpreparedness before Pearl Harbor, this is a story of foresight and enterprise on the part of both Government and Industry.

Realizing the danger of being cut off from processed metal by seizure of smelters in the Dutch East Indies and bombing of smelters in the British Isles, the U. S. secured Bolivia's entire tin output for a smelter yet to be built. When negotiations were completed, construction of the big smelter in Texas began.

The Billiton Company, experienced in East Indies tin production, built the Longhorn plant on the Texas Gulf Coast, from which tin was delivered by April 5th, 1942.

Behind this achievement is the long-standing realization of the unsatisfactory dependence of U. S. tin on distant foreign sources. At the same time, it was realized that Bolivian ores were of lower grade, would require hard rock mining methods, while East Indian high grade ores were largely alluvial. In 1937, territories now under Japanese control produced 140,000 long tons, Bolivia only 25,000.

The U. S. has always used more tin than any other nation in the world but never smeltered it on a major scale until today. Dutch and British smelters, closer to sources of supply, were more economical. As a result, two smelters constructed during World War I were abandoned because they did not pay.

Today, the Government smelter in Texas is producing 50,000 long tons a year. 498

Typhus Controls

American medical discoveries which promise to wipe out typhus fever among American forces all over the world have been announced. Much is preventive medicine. Since body lice are carriers of typhus, American discovery of a chemical which will kill cooties and their eggs is hailed as a miraculous discovery. 499

Ecuadorian Hemp

A new source of fibre has been discovered in the Pasaje area of Ecuador and 500 plants of the African bowstring hemp type are under cultivation. It is reported to be "as good as, if not better than, sisal hemp". With manila hemp cut off by the war, the Americas are cooperating in a program to increase fibre production. 500

Polyvinyl Compounds

Polyvinyl compounds in a special form are claimed to make an excellent undercoat when it is desired or necessary to coat rubber surfaces with a lacquer of oil varnish, according to a recent British patent. Rubber balls, for example, can be so coated to produce a very adherent finish. 501

Vegetable Rash

Some vegetable dehydrators have reported that their employes working at trimming tables and the like have been troubled with a rash or swelling of the hands—a sort of vegetable poisoning. Since prevention is more important than remedy, some plants use a special chemical preparation which is in most cases a preventive as well as remedy, to supplement wearing of rubber gloves, keeping hands as dry as possible and washing with disinfectant soap. 502

Effective Finishes

Hammered metal finishes are simulated by coatings described in two recent patents. The first involves the application of a coating containing metallic powders and spraying with large droplets of solvent. The second advocates the production of hammered effects in one coating by the use of a small amount of raw rubber. 503

Cow to the Rescue

Vinegar from milk? An enterprising Western outfit has uncovered a means of processing a milk residual product into a high quality white still vinegar. Thus the cow helps again to relieve wartime shortages, if you're interested. 504

Industrial Thermometer

A one-piece industrial thermometer designed to save critical materials in war time has been introduced. It is said to be dustproof, rattleproof and practically fumeproof—with a wider than usual angle of vision for the mercury column. 505

Fish Positioner

To reduce the amount of manual labor involved in packing fish in cans, an inventor has recently perfected and patented a mechanism for positioning the pack. 506

Milk Dryer

A new process for drying milk has been developed and patented recently. The system permits aeration of the milk while drying. 507

NATIONAL CAN

PLANTS: NEW YORK · BOSTON · BALTIMORE · CHICAGO · HAMILTON, OHIO · FORT WAYNE, INDIANA

Antiseptic Foot Spray

In place of the usual foot baths the government is reported to be experimenting with the use of atomizers which disperse an antiseptic spray for the prevention of epidemics of athletes' foot in Army camps, shower rooms, bathing pools, etc. The efficacy of foot baths has been questioned by many authorities in the past who report that in many cases they serve, after the antiseptic liquids have lost their potency, merely as sources of infection. The units being tested consist of sets of nine atomizers which throw an antiseptic spray over the feet. An order for 1,000 of the units is reported to have been placed on the west coast. 508

Fungicides For Post-War Control

A serious post-war problem will be the development of a control program to prevent entry into the country along with returning members of the Armed Forces of organisms that may cause disease or damage American crops or plants. Inasmuch as the potential danger lies principally with sporulating organisms, such as fungi and molds, fungicides will inevitably be of primary importance in formulating the control program. 509

Keeping Quality Bettered

To improve the keeping quality of the juice extracted from fruits, a new method of cleansing the surface of the fruit prior to extracting the juice has been developed. Information on a simple procedure is available. 510

Second Bactericide From Bread Mold

The common forms of green mold on bread and cheese—penicillium notatum—have given the world penicillin, heralded as the greatest yet known germ killer. Scarcely has the word of a few examples of its remarkable potency come into the thinking of the man in the street before scientists have announced a second anti-bacterial substance coming from this same bread-cheese mold. This newest bactericide is able to act against a number of organisms which are not especially sensitive to penicillin. If you've missed details of its name, background and reactions, they're yours for the asking. 511

Britain Permits Paint For Private Property

Britain has permitted the manufacture of paint in four colors for outside use on private property. Permission to manufacture the "utility" paint has been extended to selected firms in given areas in containers containing one pint and one quart. The specifications for the paint call for a special combination of materials. The intention is that the paint be used for exterior purposes only, and repainting done only where necessary. The manufacture of household paints heretofore had been banned in Britain, to save critical materials. 512

Technical Topics

VITAMINED CHOCOLATE — Foreign experiments show that vitamin-fortified chocolate is a practical (and pleasant) way of providing vitamins, having a natural tendency towards preservation of potency of the vitamins. 513

BIODYNES—The newest application of life forces, this time through the cosmetic field, is announced. Incorporated in a night cream and a day lotion, they are reported by a leading research institution to step up skin respiration which usually slows as age increases. 514

MULTI-USE GRASS—A new kind of grass found in a South American country is reported rich in a variety of uses—ranging from insect repellent to clearer of ticks from cattle with brief pasturing. 515

COSMETIC OILS—Oil from a nut tree, anti-oxidated by gum from a tropical tree, has been suggested for cosmetics because of its property of absorbing and holding odors. 516

"DEMEROL"—A synthetic substitute for morphine, formula for which is available, will soon be ready for the public. 517

WATER STERILIZER—Foreign experiments reveal iodine, in a formula solution which is available, is more effective than chlorine in sterilizing water. 518

WOOD PRESERVATIVE—A process which forces zinc chloride into wood under designated means is said to preserve the life of the wood three to ten times. 519

LACTIC ACID—Conversion of lactic acid to a substance useful as adhesives, impregnating and coating materials has been worked out by a Department of Agriculture. 520

QUEBRACHO EXTRACT — Recently suggested as a flotation aid in the froth purification of barytes minerals. Barytes floated with customary froth promoters, such as fatty acid compounds, often presents a difficulty in obtaining a good concentration, paticularly when the ore contains gangue minerals of the chlorite group. 521

AMINO-HYDROXYPHENYL ARSINE —Introduced by a foreign pharmaceutical company for the treatment of spirochaetal infections similar to syphilis. It is offered in ampoules suitably diluted to facilitate the preparations of isotonic solutions for intravenous injection. 522

SODIUM FLUORIDE—A high quality, silica-free purity is declared to be possible from hydrofluosilicic acid in a recent British patent. 523

MONO SODIUM GLUTAMATE—A desirable replacement or extender for this article (used extensively for flavoring soups, gravies, stews and other similar products, and which is now practically unobtainable for civilian use) has recently become available. A bone-dry powder, it is said to be specially desirable, from flavor and nutritional standpoint, in production of bouillons. 524

METHOXYTRIGLYCOL ACETATE—Offered in research quantities, with the suggestion that its low volatility, non hygroscopicity, and excellent solvent powers for cellulose esters and synthetic resins indicate a potential usefulness in protective coatings, printing inks, and as an anti-dusting agent for fine powders. 525

HYDROFLUORIC ACID — Production by a continuous process from fluorspar and sulphuric acid is described in a recent British patent. Instead of mixing ground fluorspar and sulphuric acid into a paste-like mixture, the patent advises a procedure which is claimed to produce gaseous fluorine compounds more uniformly and at a lower temperature. 526

SODIUM SILICOFLUORIDE — Under investigation by a foreign leather industry as a preservative for hides against attack by hide beetles. 527

"STOREHOUSE" FISH—A prolific fish, known under many names from Maine to South Carolina, is a storehouse of all the elements necessary for a healthful diet, it is claimed. The fish's name and elements are yours, if you're interested. 528

PLANES TO POWDER—A plant engaged in an airplane construction process contributes to new cosmetic cases, it is reported. 529

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York City. Please mention the number at end of article—also name of the magazine you saw in.

NATIONAL CAN CORPORATION

Manufacturers of

SANITARY PACKERS CANS · PLAIN AND LITHOGRAPHED CANS FOR FOODS, DRUGS, OILS, PAINTS, VARNISHES · STEEL DRUMS AND PAILS

Deliveries Subject to Priority Ratings

(*Advertisement*)

Come and Get It
You Sons of Heaven

Through surf and mud, in jungle heat and arctic cold, rust preventatives keep our boys' death-dealing precision instruments at maximum lead-spitting efficiency.

Wool grease is a *vital* ingredient of many rust preventatives. That's why there's less wool grease for consumer goods.

When this affair with Adolf's Super Race and Tojo's Sons of Heaven is ended – *and it's coming fast* – Nimco Brand Degras, Lanolin and other grades of wool greases will be available in abundance again.

Lanolin and Wool Greases Help Fight for Victory

BUY WAR BONDS

and support the fight

MALMSTROM · NIMCO BRAND · LANOLIN

N. I. MALMSTROM & CO.

America's Largest Suppliers of

LANOLIN • Anhydrous U.S.P. • Hydrous U.S.P. • Absorption Base • Technical

DEGRAS • Neutral and Common • Wool Greases

147 LOMBARDY STREET • BROOKLYN, NEW YORK

In 1839, Niepce and Daguerre of Paris discovered how to fix an image on a tin plate, and the art of photography was born... Tin-type methods were simple and crude beside the long-range, high-speed, full-color photography of today.

NEUTRAGLAS . . . offering the highest resistance to solvent action and chemical attack . . . was developed by Kimble because no glassware can be just "good enough" if better is obtainable.

Standardize NOW *on Kimble Ampuls, Serum Vials, Serum Bottles and Clinical Glass containers of* NEUTRAGLAS.

• • • *The Visible Guarantee of Invisible Quality* • • •

Balsamol
In BALSAMOL, we have incorporated the freshness of all outdoors... the healthy odor of deep woods and mountain air + Possessing a truly balsamic and retentive odor, BALSAMOL will replace all the natural balsam and gum characters in your formulae—most effectively and without their inconveniences. ++ BALSAMOL is especially good as a base and fixative for floral types. When used in combination with smooth warm tones, it forms the background of many present-day popular perfumes.
$30.00 per pound. Write us for further details and suggestions.
Firmenich & Co.
135 FIFTH AVENUE, NEW YORK, N. Y.
CHICAGO OFFICE · 612 NORTH MICHIGAN AVENUE

WHOA, ROVER!

Naturally, Rover, you wouldn't understand—but your mistress' eye was caught by those gleaming, graceful Maryland Glass Bottles in the store window . . . . . Yet, smart as are the Maryland Glass designs of pre-war origin, they will be supplanted by even more alluring styles after Victory . . . . In your post-war planning, keep posted on Maryland Glass bottles and jars.

MARYLAND GLASS CORPORATION, BALTIMORE, MD. . . . . New York: 270 Broadway . . . . Chicago: Bermen Bros., 1501 S. Laflin St. . . . . St. Louis: H. A. Baumstark, 4030 Chouteau Ave. . . . . Memphis: S. Walter Scott, 435 S. Front St. . . . . Kansas City, Mo.: Aller Todd, 1224 Union Ave. . . . . Cincinnati: J. E. McLaughlin, 401 Lock St. . . . . San Francisco: Owens-Illinois Pacific Coast Co.

MARYLAND

Bottles & Jars

LIGHT, MEDIUM AND HEAVY GRADES

Rigid uniformity in the
specific grade desired

●

**Depend on STURGE for QUALITY
and UNIFORMITY**

JOHN & E. STURGE

Limited

Distributors:

H. J. BAKER & BRO.

271 Madison Ave. • New York, N.Y.

These Chemicals

Chemical	Formula	Boiling Point °C., 760mm.	Vapor Pressure mm., 20°C.	Solubility % by weight at 20°C.		Flash Point Open Cup°F.
				In Water	Water In	
Trichlorethane	$ClCH_2CHCl_2$	113.7	16.7	0.45	0.05	None
Diethyl "Cellosolve"	$C_2H_5OC_2H_4OC_2H_5$	121.4	9.4	21.0	3.4	95
n-Hexanol	$CH_3(CH_2)_4CH_2OH$	157.2	0.7	0.58	7.2	165
Methyl "Carbitol"	$CH_3OC_2H_4OC_2H_4OH$	194.2	0.2	Complete	Complete	200
Hexyl Ether	$C_6H_{13}OC_6H_{13}$	226.2	0.07	<0.01	0.12	170

are available in limited quantities

Here are five synthetic organic chemicals that were available in drum quantities at the time this magazine went to press. Have you investigated their possible uses in your processes? Some of them may help meet your present raw material needs.

Trichlorethane is colorless, non-flammable, and stable under ordinary conditions of use. It is a good solvent and extractant for most oils, fats, waxes, natural rubber, and some types of synthetic rubber.

Diethyl "Cellosolve," a stable ether, dissolves both oils and water and is an excellent mutual solvent. With alcohol, it is a solvent for nitrocellulose.

n-Hexanol is an excellent solvent for hydrocarbons, linseed oil, shellac, rosin, gums, and dyestuffs. It is also used in hydraulic brake fluids.

Methyl "Carbitol" is miscible with water and many organic solvents. It is used in perfumes, textile dye pastes, non-aqueous wood stains, and lacquers.

Hexyl Ether is a mild-odored, stable liquid, with a high boiling point. It is used as an inert reaction medium, and as an anti-foam agent particularly in certain types of adhesives.

For information concerning the use of these chemicals, address:

CARBIDE AND CARBON CHEMICALS CORPORATION

Unit of Union Carbide and Carbon Corporation

30 East 42nd Street UCC New York 17, N. Y.

PRODUCERS OF SYNTHETIC ORGANIC CHEMICALS

★Safeguard the Quality
★Stabilize the Production
of your cosmetics by standardizing on
Penn•Drake Petrolatum

Made from finest Pennsylvania Oils

There is no finer base oil than 100% Pennsylvania Pure Crude Oil, the world's finest, used in the manufacture of Penn-Drake Petrolatum.

Dependably Uniform and Pure

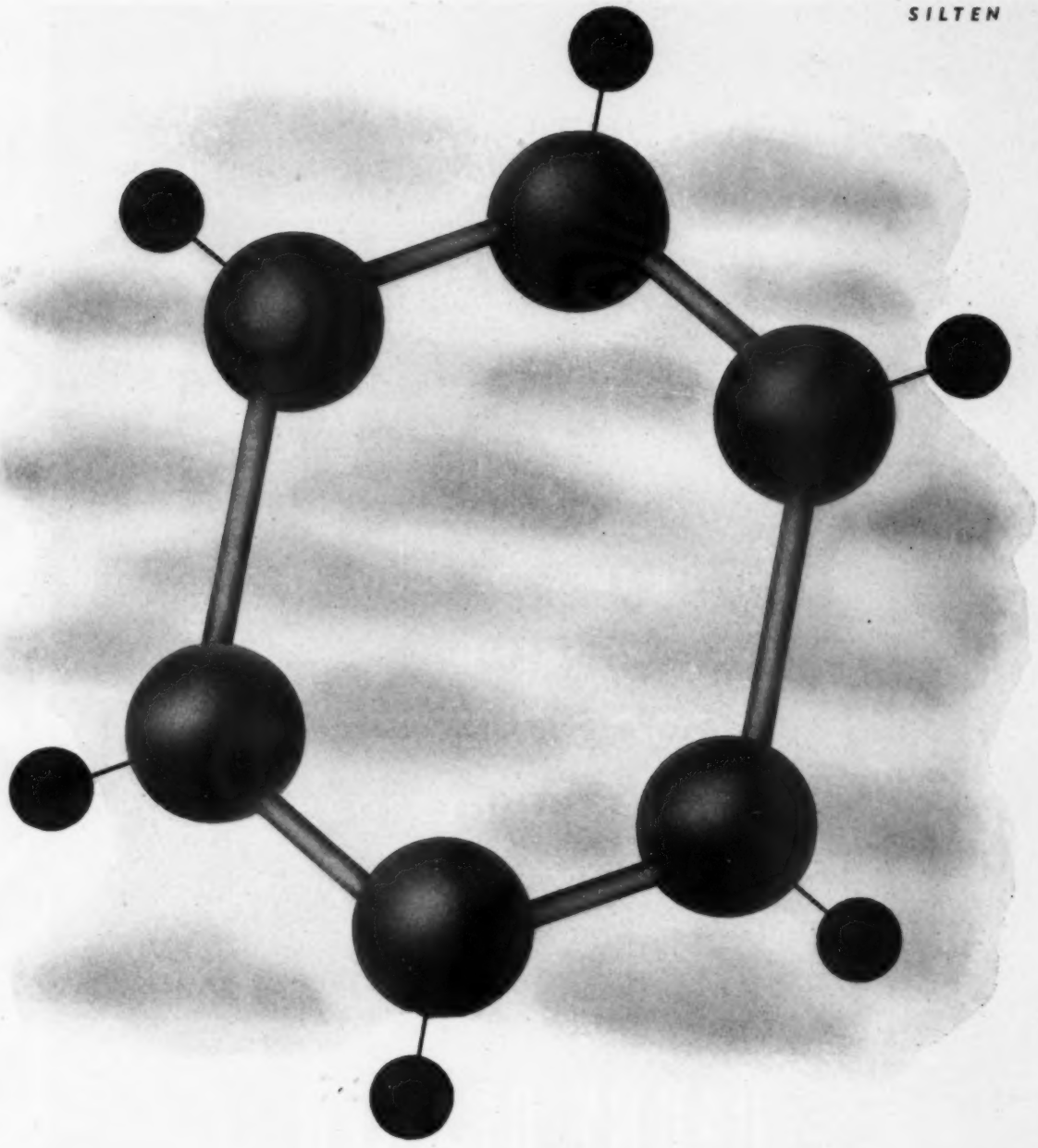
Penn-Drake Petrolatum is permanently pure, odorless and tasteless—with amazing resistance to light and heat. All harmful impurities are removed by the Penn-Drake exclusive manufacturing process, the culmination of seventy years of petrolatum refining experience.

To make your fine preparations BETTER . . . WRITE to Dept. 103 for full information.

penn drake petroleum products

Pennsylvania Refining Company
BUTLER, PA.
Makers of White Oils (U.S.P. and Technical); Petrolatums (all grades and colors); Waxes and other petroleum products

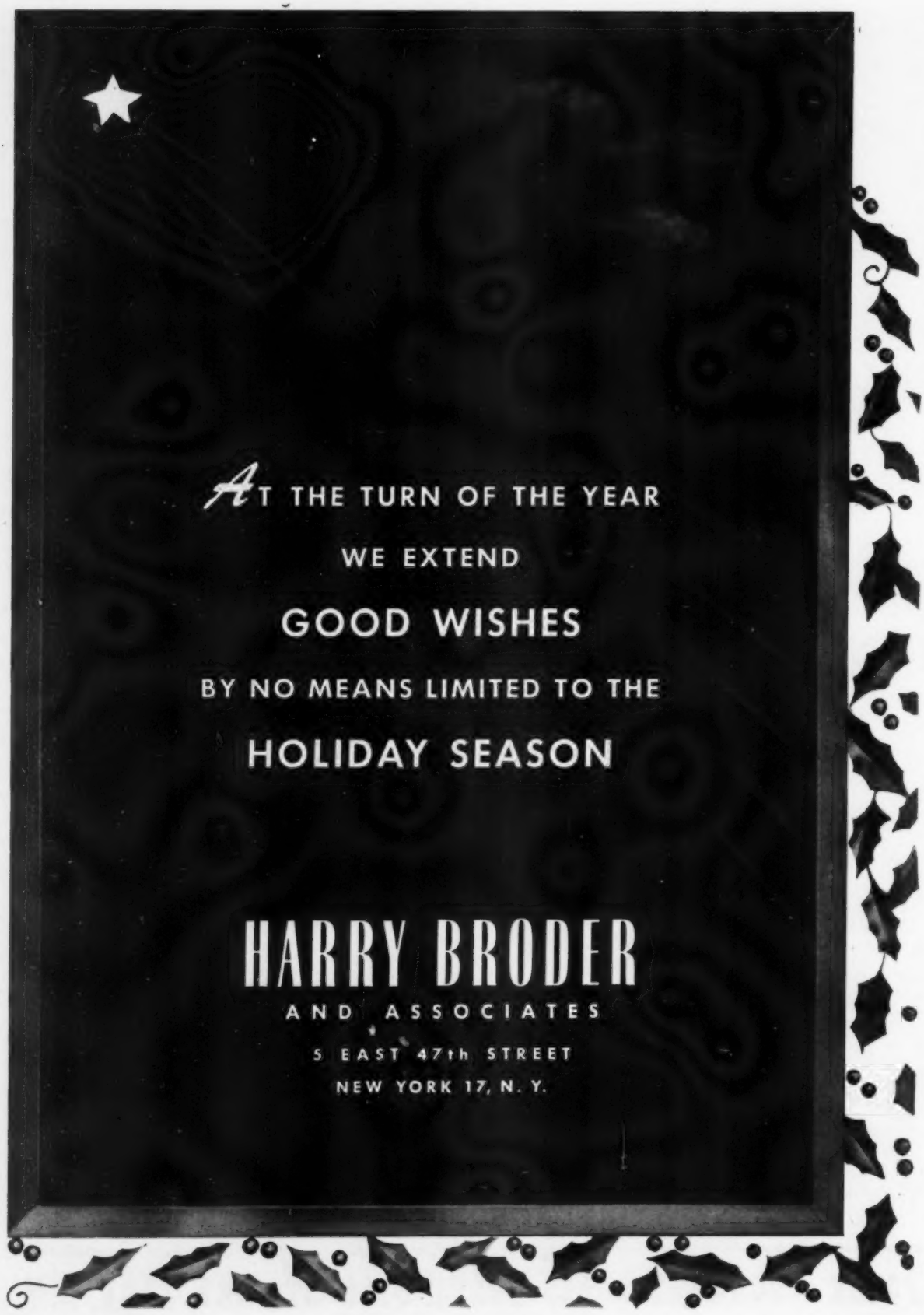
SILTEN



Iso Bergamone

the *scientifically* developed synthetic Bergamot oil

POLAK & SCHWARZ INC. 667 WASHINGTON ST., NEW YORK, N. Y.


AT THE TURN OF THE YEAR
WE EXTEND
GOOD WISHES
BY NO MEANS LIMITED TO THE
HOLIDAY SEASON
HARRY BRODER
AND ASSOCIATES
5 EAST 47th STREET
NEW YORK 17, N. Y.

schimmel

masking agents for isopropyl alcohol mask and mellow the basic disagreeable odor of this useful product

These different masking agents tone in with and enhance the perfume used in the finished product.

MASKING AGENT 3046 . . . $5.60 lb.

Recommended for light floral bouquets such as clover, as well as for rubbing alcohol and similar preparations.

MASKING AGENT 3047 . . . $4.00 lb.

For use in connection with floral bouquets of medium heavy type and also with lily of the valley and similar odors.

MASKING AGENT 3048 . . . $5.50 lb.

For use in connection with floral and fancy bouquets of all types, colognes, etc. This particular masking agent is found most satisfactory for all around use.

MASKING AGENT 3150 . . . $7.25 lb.

For use particularly in connection with lavender, chypre and fougere bouquets.

For any of the above, use ¼ oz. per 1 gallon Isopropyl alcohol. Let the mixture stand for one week, after which it is ready for use.

SCHIMMEL & CO., INC.
601 West 26th Street
NEW YORK 1, N. Y.

EMULSIFIERS

Available now

ATLAS G-1162

ATLAS G-2971

ATLAS G-1166

Powerful, high quality emulsifiers.
Available now for cosmetic use.
Data and samples upon request.

Modified fatty acid esters

•

G-1162 . . . . . *waxy*
G-2971 . . . . . *liquid*
G-1166 . . . . . *liquid*

•

O/W and W/O type emulsifiers

Buy War Bonds

ATLAS INDUSTRIAL CHEMICALS DEPARTMENT

CHEMICALS ATLAS EXPLOSIVES

ATLAS POWDER COMPANY, Wilmington 99, Del. • *Offices in principal cities* • *Cable Address—Atpowco*

IT'S SMART TO BE *Different...*

The photograph (of Round Toilet bottles, manufactured in 8 sizes from 1 to 21½ ozs.) may not bear any resemblance to your package or product. But the basic principle is the same, regardless of what Duraglas container you use or what product you pack.

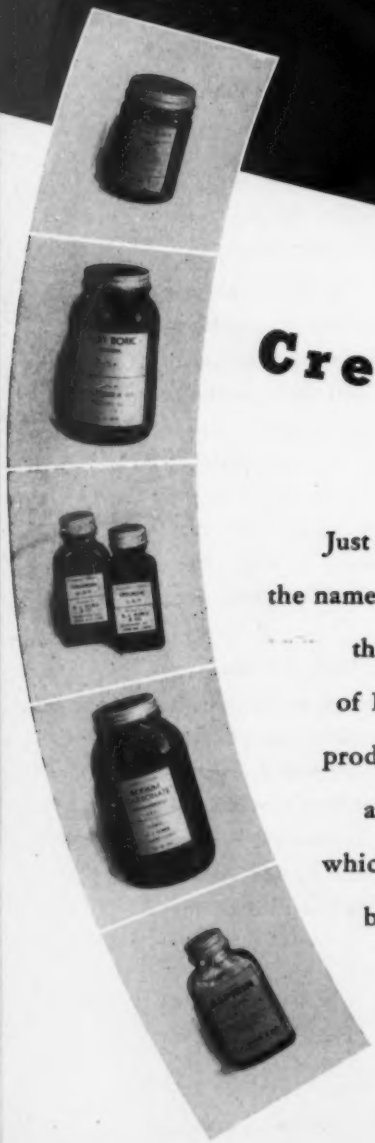
And Users of Stock Bottles *Can* Be

Packaging distinctiveness is not necessarily limited by the availability and cost of the container.

Because of their simplicity, Duraglas stock bottles permit the widest possible variation in appearance of the finished package. Following the suggestions of Owens-Illinois label counselors, our customers have found that the same container can give an impression of femininity or ruggedness, of "counter appeal" or professional dignity.

To users of Duraglas stock containers, we address an open invitation: If your package does not offer quick and positive *brand recognition* —if it does not have *merchandising appeal*—or if it does not have *personality,* call on us for help. It should and *can* have all of these qualities.

OWENS-ILLINOIS
GLASS COMPANY TOLEDO, OHIO



Creator of Confidence

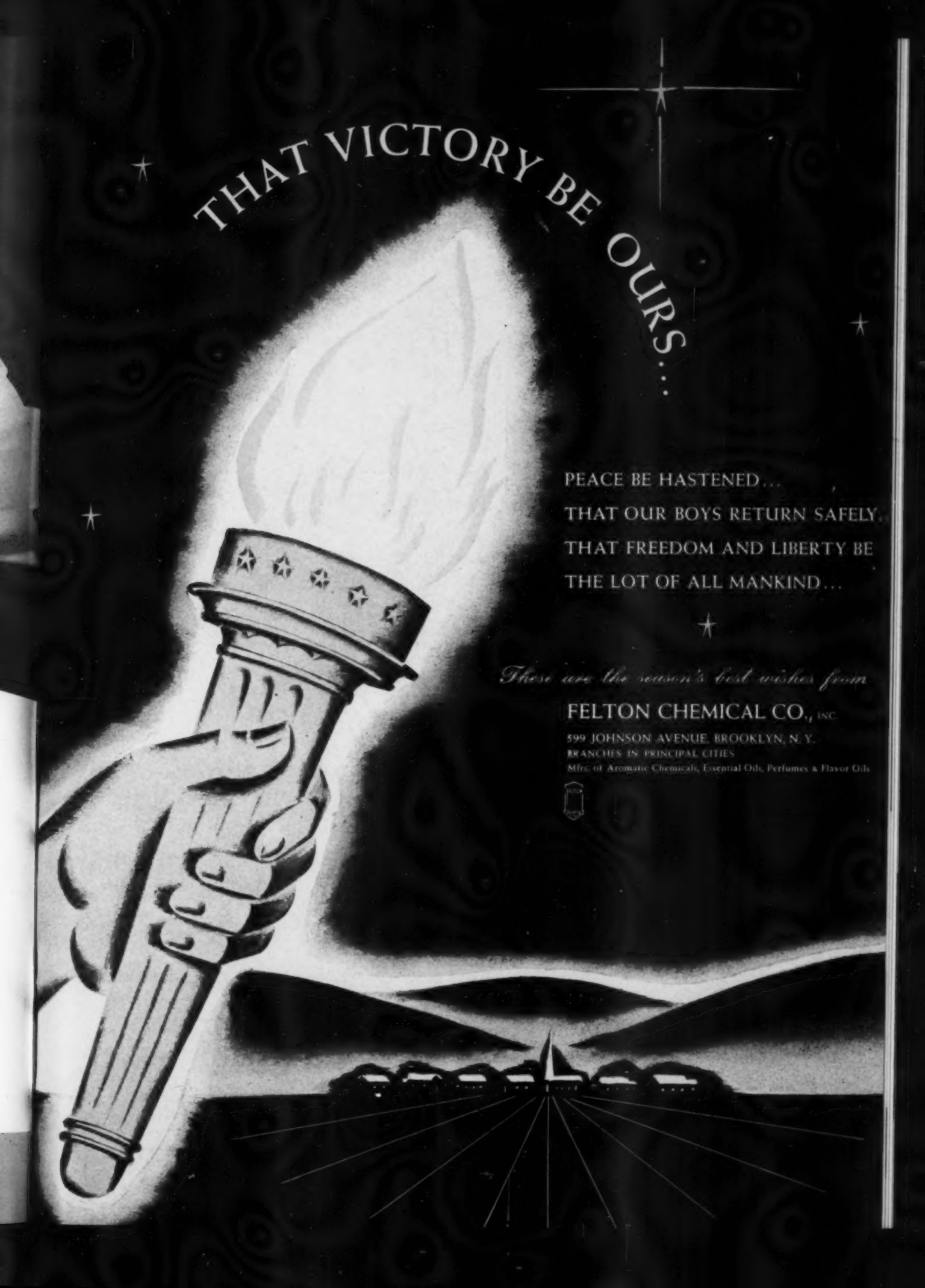
Just as the physician's name on the prescription means so much to the patient, the name of the pharmaceutical house on the drug product is equally significant to the pharmacist. ◆ That is why, among the druggists of America, the name of R. J. Weber & Company, Chicago, has long been a trustworthy guide to products of the highest purity and quality. ◆ Shown here is a representative assortment of pharmaceuticals made by R. J. Weber & Company, all of which are securely sealed with Crown Screw Caps . . . the cap that can always be relied upon for safe sealing because of its patented Deep Hook Thread.

CROWN CORK & SEAL CO., BALTIMORE, MD.

World's Largest Makers of Closures for Glass Containers

CROWN CLOSURES

CROWN'S WARTIME POLICY: *To supply closures, containers and services for packaging foods, beverages, chemicals, etc., needed by civilians and the armed forces. To build an ever-increasing volume of vitally needed weapons of war for our fighting men.*


THAT VICTORY BE OURS...
PEACE BE HASTENED...
THAT OUR BOYS RETURN SAFELY.
THAT FREEDOM AND LIBERTY BE
THE LOT OF ALL MANKIND...
These are the season's best wishes from
FELTON CHEMICAL CO., INC.
599 JOHNSON AVENUE, BROOKLYN, N. Y.
BRANCHES IN PRINCIPAL CITIES
Mfrs. of Aromatic Chemicals, Essential Oils, Perfumes & Flavor Oils

FOR REPLACEMENTS THAT "C

AT "COME THROUGH"

BUY WISELY...BUY Givaudan

Like the Army's famous jeep, many among today's "newcomers" born of wartime emergency, are proving themselves more versatile, and in countless cases, are performing with an efficiency far beyond what was expected of them.

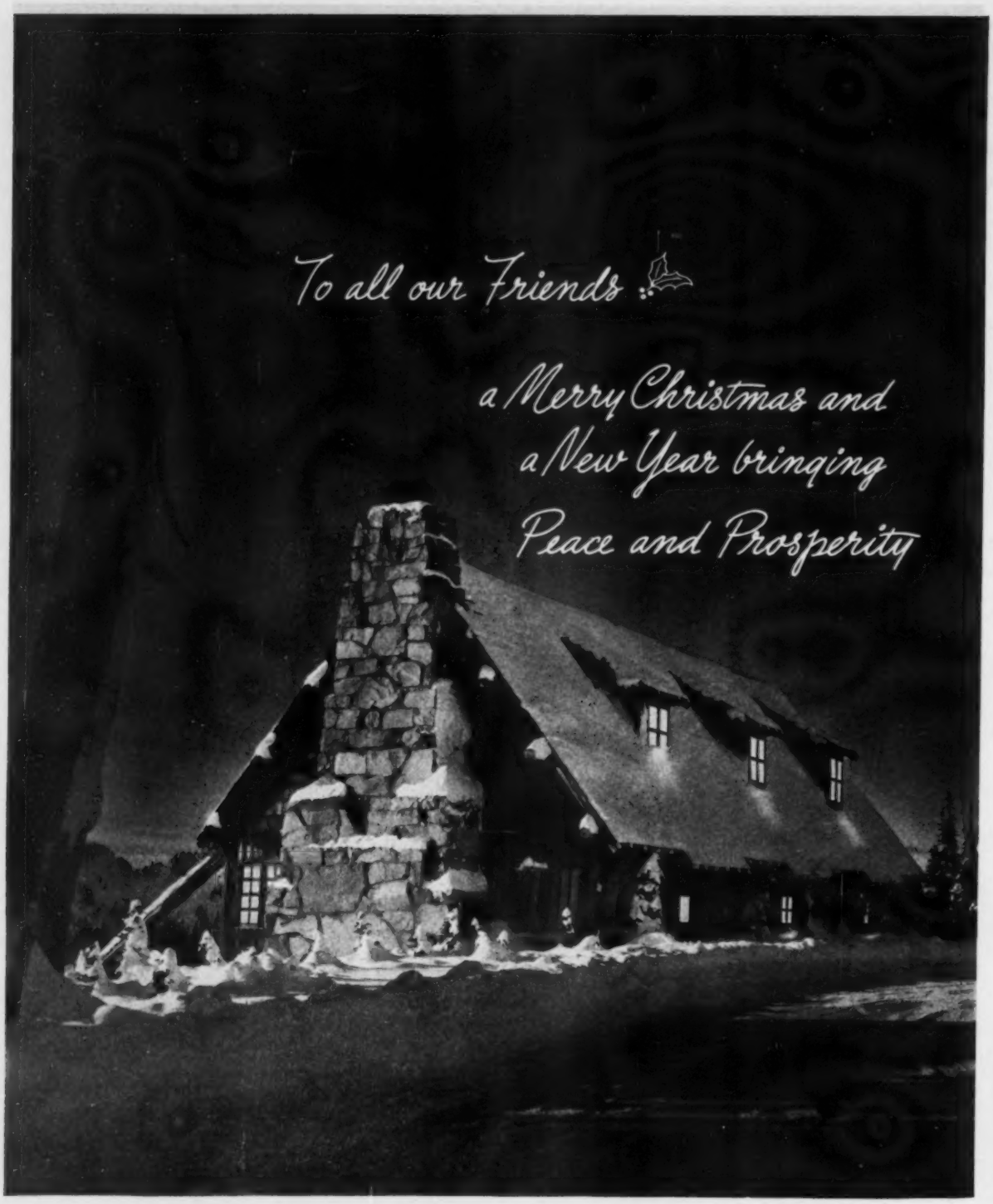
It is replacements of this caliber that Givaudan's research is hard at work developing...substitutes *plus* that give "extra value" to Givaudan's high quality standards.

All of these replacement materials are not new. Actually many of today's outstanding "pinch-hitters" are long-known, highly regarded products for which new uses have been found. But whether it be new product, or old product with new use, you can be sure that whatever Givaudan supplies will be the finest that can be produced under today's limitations...sound assurance that it pays to "Buy Wisely...Buy Givaudan."

Givaudan-Delawanna, Inc.

330 WEST 42nd STREET • NEW YORK 18, N. Y.

OUR PLANT FACILITIES ARE AVAILABLE FOR ANY FURTHER CONTRIBUTION WE MAY MAKE TO PRODUCTION OF MATERIALS FOR THE WAR EFFORT



HEYDEN CHEMICAL CORPORATION

50 UNION SQUARE NEW YORK 3 • BRANCH: 180 N. WACKER DR. CHICAGO 6

W
w
p
T
n
t
i
u
A
p

Official U. S. Coast Guard Photo

Planning does it!

Behind the magnificent job of enemy submarine control by the men of our Navy, Coast Guard, Army Air Force and CAP, is efficient planning. And as a result, the submarine menace is diminishing.

Whether it's dropping eggs on submarines or refining White Mineral Oil and Petrolatum, it takes intelligent planning to do the job right.

Thirty-nine years of this kind of planning . . . plus unmatched production efficiency . . . enables SONNEBORN to meet rigid requirements of the drug and cosmetic industries for White Mineral Oils and Petrolatums of unexcelled Quality, Uniformity and Dependability.

Along with every refinery and plant in the American petroleum industry, we are making government cooperation for victory our first consideration. However, we can still supply quantities of SONNEBORN U.S.P. and Technical White Mineral Oils and U.S.P. Petrolatums. (See partial list below.) And we are prepared to assist you in adapting these materials to the solution of your wartime problems.

Call on us, too, as others are doing, to help you in planning for peacetime production.

Back the Attack—Buy War Bonds!

WHITE MINERAL OILS

KAYDOL U. S. P. Heavy
ORZOL U. S. P. Heavy
PURITAN U. S. P. Heavy
ERVOL U. S. P. Light
BLANDOL U. S. P. Light
CARNATION
KLEAROL

PETROLATUMS U. S. P.

TYPE I: *Medium Consistency—White Protopet—Yellow Protopet and other colors*

TYPE II: *Soft Consistency — White Fonoline — Yellow Fonoline*

TYPE III: *Medium Consistency With High Melting Point —White Perfecta*

SPECIALTIES

PETROMIX— Base for the manufacture of soluble oils and various types of emulsions.

SONO-JELL— Complete series for liquefying cleansing creams, pomades, ointments, etc.

DEO-BASE— Light hydrocarbon distillate refined to complete freedom from kerosene odor.

L. SONNEBORN SONS, INC.

Refiners of White Mineral Oil and Petrolatum. Refineries: Petrolia and Franklin, Pa.

NEW YORK · CHICAGO · BALTIMORE · PHILADELPHIA · LOS ANGELES · Stocks Carried in Principal Cities

Southwestern Distributors: Sonneborn Bros., Dallas, Texas

BOLDNESS IS STRENGTHENED BY CAUTION

Success in tackling something new requires a mixture of boldness and caution.

Your own experience undoubtedly confirms this fact, and chemical research here at Emery is based on it. Bold planning and experiment bring forth new products. Cautious testing and checking mature them before they are announced to industry.

The checking never stops. Even those products we've been making for 100 years are still watched over by constant laboratory control.

Because of Emery's cautious boldness, you, as a present or future user of our products, have the valuable assurance that these materials will *always* perform as specified.

LABORATORY CONTROLLED THROUGHOUT PRODUCTION

TWO LATEST PRODUCTS OF EMERY RESEARCH

AZELAIC ACID—A nine-carbon dibasic acid with a carboxyl radical at each end of the chain. Esters of azelaic acid with glycerine and other polyhydric alcohols produce *soft* alkyd resins. The esters of monohydric alcohols have relatively high boiling points suggesting their use as plasticizers.

PELARGONIC ACID — A nine-carbon aliphatic fatty acid with only one carboxyl radical. Forms high boiling esters which are compatible with many resins. A primary agent in the oil modification of alkyd resins.

Further information and laboratory samples available on request.

EMERY INDUSTRIES, INC.

MAKERS OF STEARIC AND PALMITIC ACIDS, OLEIC ACID, FATTY ACID DERIVATIVES, TWITCHELL PRODUCTS, GLYCERINE, PITCH, CANDLES, SANITONE

CINCINNATI, OHIO

Established 1840

New England Office
187 Perry Street
Lowell, Mass.

Canadian Representative
Canada Colors & Chemicals, Ltd.
Toronto, Ont., Canada

New York Office
1336 Woolworth Bldg.
New York, N. Y.

BUY WAR SAVINGS STAMPS AND BONDS EVERY PAYDAY

A PRESERVATIVE NOT ON PRIORITY

BUTOBEN

Reg. U. S. Pat. Off.

Have current shortages of materials made it necessary for you to revise your formulas requiring a preservative? Or are you, perhaps, looking for a more potent one?

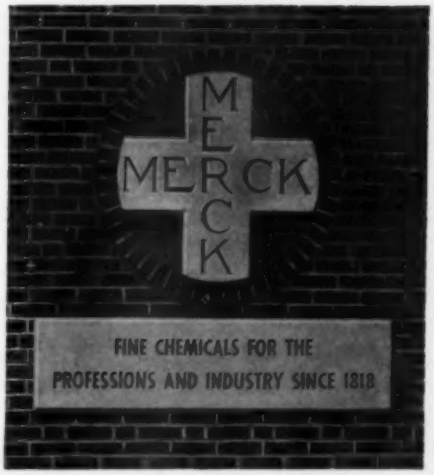
BUTOBEN (*n*-Butyl Parahydroxybenzoate Merck), an antiputrefactive and antifermentive agent, is an effective, nontoxic preservative in various preparations, and can, in most instances, be used in place of some of the preservatives which now may be unavailable.

BUTOBEN can be used in acid and neutral products, as well as in moderately alkaline media. It is economical because of the small quantity required (2/100 of 1%), *i.e.,* only 1 ounce is required to preserve 35 gallons of a preparation. Suggested uses are in gum solutions for hairwave setting, and various types of liquid preparations, including face and hand lotions, cosmetic creams, medicinal elixirs, tonics, certain eye lotions, and emulsions.

BUTOBEN, while an excellent preservative for the aqueous phase of cosmetics, does not prevent rancidity of oils and fats, as this is not caused by micro-organisms, but by hydrolysis and subsequent oxidation, and for which purpose an antioxidant is required.

As many cosmetic and medicinal preparations are composed of several ingredients, some of which may be incompatible with certain preservatives, we suggest that you consult the Merck Chemical Service Department regarding your manufacturing problems and requirements.

Samples of BUTOBEN will be supplied to manufacturers on request.



MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

New York, N. Y. • Philadelphia, Pa. • St. Louis, Mo. • Elkton, Va. • Chicago, Ill. • Los Angeles, Cal.

In Canada: MERCK & CO. Limited, Montreal and Toronto

INDOLINE

Not a substitute for INDOL but a product superior in

LASTING QUALITY
SWEETNESS and
PERFUME VALUE

Please Write for Free Sample

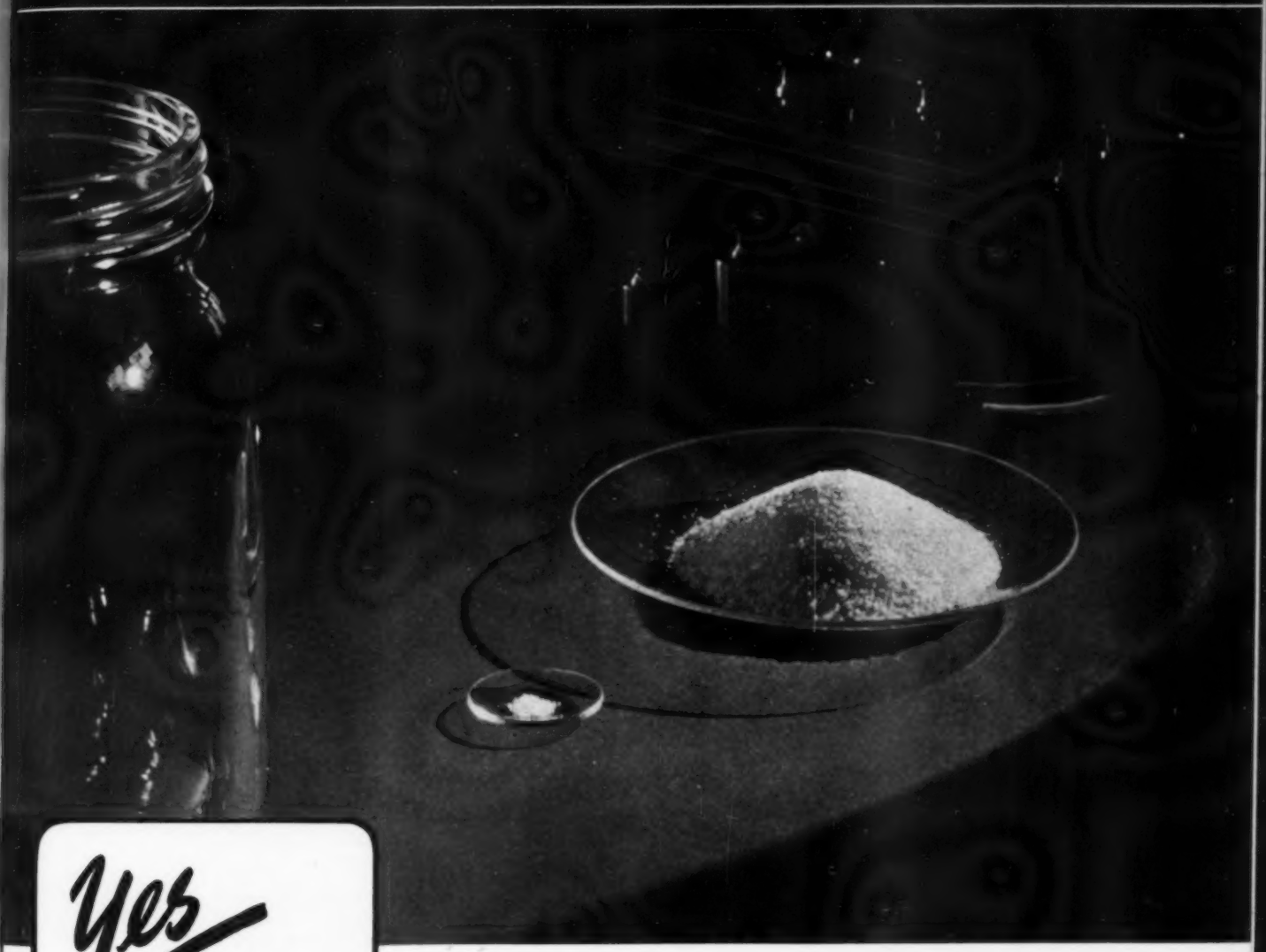
Norda

ESSENTIAL OIL AND CHEMICAL COMPANY, INC.

NEW YORK OFFICE
601 WEST 26TH STREET

CHICAGO: 325 W. HURON STRFET
LOS ANGELES: 2800 E. 11TH STREET
ST. LOUIS: 1123 WASHINGTON AVE.
FRANCE: PLACE VENDOME, 8, PARIS
ST. PAUL: 253 E. 4TH STREET
HAVANA, CUBA: SAN LAZARO #671
CANADA: 119 ADELAIDE ST., W. TORONTO
135 COMMISSIONERS ST., WEST, MONTREAL
ENGLAND: 17 CREECHURCH LANE, LEADENHALL ST., LONDON, E. C. 3

1 PART IN 2000 MAKES IT CLEAR



Yes THERE'S A DIFFERENCE IN GLASS

YOU may find it hard to believe that any ingredient of fine glassware must be measured in a quantity as small as *five one-hundredths of one per cent* of the entire batch. But it's true. For instance, as little as one pound of one material in a ton of glass can make that glass decidedly clearer, brighter, more brilliant.

Such careful measurement means that the production of fine glass depends, among other things, on fine, accurate control over the ingredients. As a rule, any of today's commercial glassware will have the clarity and brilliance you expect. You can take for granted that its ingredients have been weighed and mixed with care.

But the fact that only one pound of one ingredient in 2000 pounds of glass means better ware is important to you because it proves a point—that there is a *difference in glass.*

The difference is made up of things that are little in themselves—such things as composition, thermal shock resistance, brilliance, clarity, toughness. Together they can make the big difference in the containers you buy, the difference between ordinary glass and top-quality glass.

That difference is important.

The skill and care that go into the making of Armstrong's Glass are pictorially described in our new booklet, "Men and Glass." For your free copy, drop a postcard to Armstrong Cork Co., Glass & Closure Div., 3812 Prince St., Lancaster, Pa.

ARMSTRONG'S GLASS

and **ARMSTRONG'S CLOSURES**

UNLESS YOU MOVE FORWARD

From the millions of electrons whirling around the nucleus of the tiny atom, to the immense, gyrating planets of our solar system, everything throughout the universe is in continuous motion.

Motion alone does not necessarily mean progress, however. An object—or a business—may be constantly in motion, yet, moving only within a fixed orbit!

Never having been content to merely travel in circles, we have constantly endeavored to be progressive in our movements. It is thus only natural that we should become adept in the art of prodding tomorrow's possibilities with the performance of today.

Because of our unremitting search for faster, more efficient methods of improving the basic techniques of glass making . . . and because of our effort to incorporate the newest processing discoveries in the finished product as quickly and economically as possible . . . Carr-Lowrey glass has long been the choice of many of America's foremost manufacturers of drug, cosmetic, household and food products. From more than 50 years' experience we have learned that while it's all right to be constantly on the move, ***you really don't get anywhere UNLESS YOU MOVE FORWARD!***

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD. *New York Office:* 500 FIFTH AVENUE *Chicago Office:* 1502 MERCHANDISE MART

COMMERCIAL SOLVENTS
Corporation
17 East 42nd Street, New York 17, N. Y.

Unsurpassed

IN PURITY, CLARITY, AND FREEDOM FROM FOREIGN ODOR

Sales Offices

BOSTON
50 Terminal St., (Charlestown)
Telephone: Charlestown 1140

CHICAGO
1817 W. Fullerton Ave.
Telephone: Lincoln 7121

CINCINNATI
49 Central Avenue
Telephone: Main 5139

CLEVELAND
1200 W. Ninth St.
Telephone: Cherry 2694

DETROIT
1900 E. Jefferson Ave.
Telephone: Fitzroy 2414

NEW ORLEANS
P. O. Box 1530
Telephone: Uptown 0027

NEW YORK
17 East 42nd Street
Telephone: Vanderbilt 6-1600

PHILADELPHIA
1600 Arch Street
Telephone—Bell: Rittenhouse 5931-32
Keystone: Race 7633

ST. LOUIS
818 Olive Street
Telephone: Chestnut 9656

SAN FRANCISCO
110 Sutter Street
Telephone: Exbrook 1611

Sales Agents

BALTIMORE, MD.
William McGill
311 East Falls Avenue

DALLAS, TEX.
Roy A. Ribelin Distributing Co.
1100 Cadiz St.

DENVER, COLO.
Chemical Sales Company
1125 Seventh Avenue

GRAND RAPIDS, MICH.
Krekel-Goetz Sales & Supply Co.
302-303 Houseman Bldg.

KANSAS CITY, MO.
John T. Kennedy Sales Co.
Southwest Blvd. and 26th St.

LOS ANGELES, CALIF.
Pitts & Loughlin
718 East 60th Street

LOUISVILLE, KY.
Thomas H. Gillessey
1278 Bassett Avenue

PORTLAND, ORE.
Van Waters & Rogers
2133 N. W. York St.

ST. PAUL, MINN.
Worum Chemical Company
794 Hampden Avenue

SEATTLE, WASH.
Van Waters & Rogers
4000 First Ave., South

SPOKANE, WASH.
Van Waters & Rogers
East 41 Gray Avenue

WINSTON-SALEM, N. C.
Milton B. Cash
110 Reynolds Bldg.

BOLDNESS IS STRENGTHENED BY CAUTION

Success in tackling something new requires a mixture of boldness and caution.

Your own experience undoubtedly confirms this fact, and chemical research here at Emery is based on it. Bold planning and experiment bring forth new products. Cautious testing and checking mature them before they are announced to industry.

The checking never stops. Even those products we've been making for 100 years are still watched over by constant laboratory control.

Because of Emery's cautious boldness, you, as a present or future user of our products, have the valuable assurance that these materials will *always* perform as specified.

LABORATORY-CONTROLLED THROUGHOUT PRODUCTION — EMERY INDUSTRIES, INC.

TWO LATEST PRODUCTS OF EMERY RESEARCH

AZELAIC ACID—A nine-carbon dibasic acid with a carboxyl radical at each end of the chain. Esters of azelaic acid with glycerine and other polyhydric alcohols produce *soft* alkyd resins. The esters of monohydric alcohols have relatively high boiling points suggesting their use as plasticizers.

PELARGONIC ACID — A nine-carbon aliphatic fatty acid with only one carboxyl radical. Forms high boiling esters which are compatible with many resins. A primary agent in the oil modification of alkyd resins.

Further information and laboratory samples available on request.

E M E R Y I N D U S T R I E S, I N C.

MAKERS OF STEARIC AND PALMITIC ACIDS, OLEIC ACID, FATTY ACID DERIVATIVES, TWITCHELL PRODUCTS, GLYCERINE, PITCH, CANDLES, SANITONE

CINCINNATI, OHIO

Established 1840

New England Office
187 Perry Street
Lowell, Mass.

Canadian Representative
Canada Colors & Chemicals, Ltd.
Toronto, Ont., Canada

New York Office
1336 Woolworth Bldg.
New York, N. Y.

BUY WAR SAVINGS STAMPS AND BONDS EVERY PAYDAY

A PRESERVATIVE NOT ON PRIORITY

BUTOBEN

Reg. U. S. Pat. Off.

Have current shortages of materials made it necessary for you to revise your formulas requiring a preservative? Or are you, perhaps, looking for a more potent one?

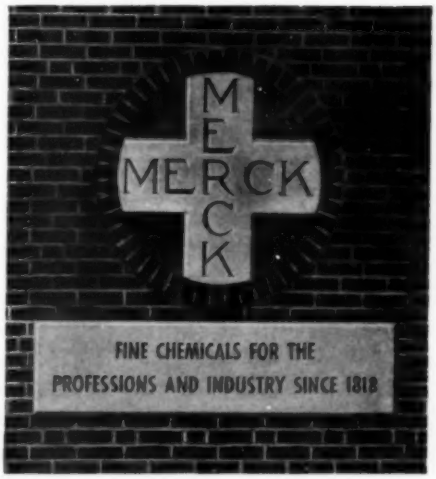
BUTOBEN (*n*-Butyl Parahydroxybenzoate Merck), an antiputrefactive and antifermentive agent, is an effective, nontoxic preservative in various preparations, and can, in most instances, be used in place of some of the preservatives which now may be unavailable.

BUTOBEN can be used in acid and neutral products, as well as in moderately alkaline media. It is economical because of the small quantity required (2/100 of 1%), *i.e.,* only 1 ounce is required to preserve 35 gallons of a preparation. Suggested uses are in gum solutions for hairwave setting, and various types of liquid preparations, including face and hand lotions, cosmetic creams, medicinal elixirs, tonics, certain eye lotions, and emulsions.

BUTOBEN, while an excellent preservative for the aqueous phase of cosmetics, does not prevent rancidity of oils and fats, as this is not caused by micro-organisms, but by hydrolysis and subsequent oxidation, and for which purpose an antioxidant is required.

As many cosmetic and medicinal preparations are composed of several ingredients, some of which may be incompatible with certain preservatives, we suggest that you consult the Merck Chemical Service Department regarding your manufacturing problems and requirements.

Samples of BUTOBEN will be supplied to manufacturers on request.



MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

New York, N. Y. • Philadelphia, Pa. • St. Louis, Mo. • Elkton, Va. • Chicago, Ill. • Los Angeles, Cal.

In Canada: MERCK & CO. Limited, Montreal and Toronto

INDOLINE

Not a substitute for INDOL but a product superior in

LASTING QUALITY
SWEETNESS and
PERFUME VALUE

Please Write for Free Sample

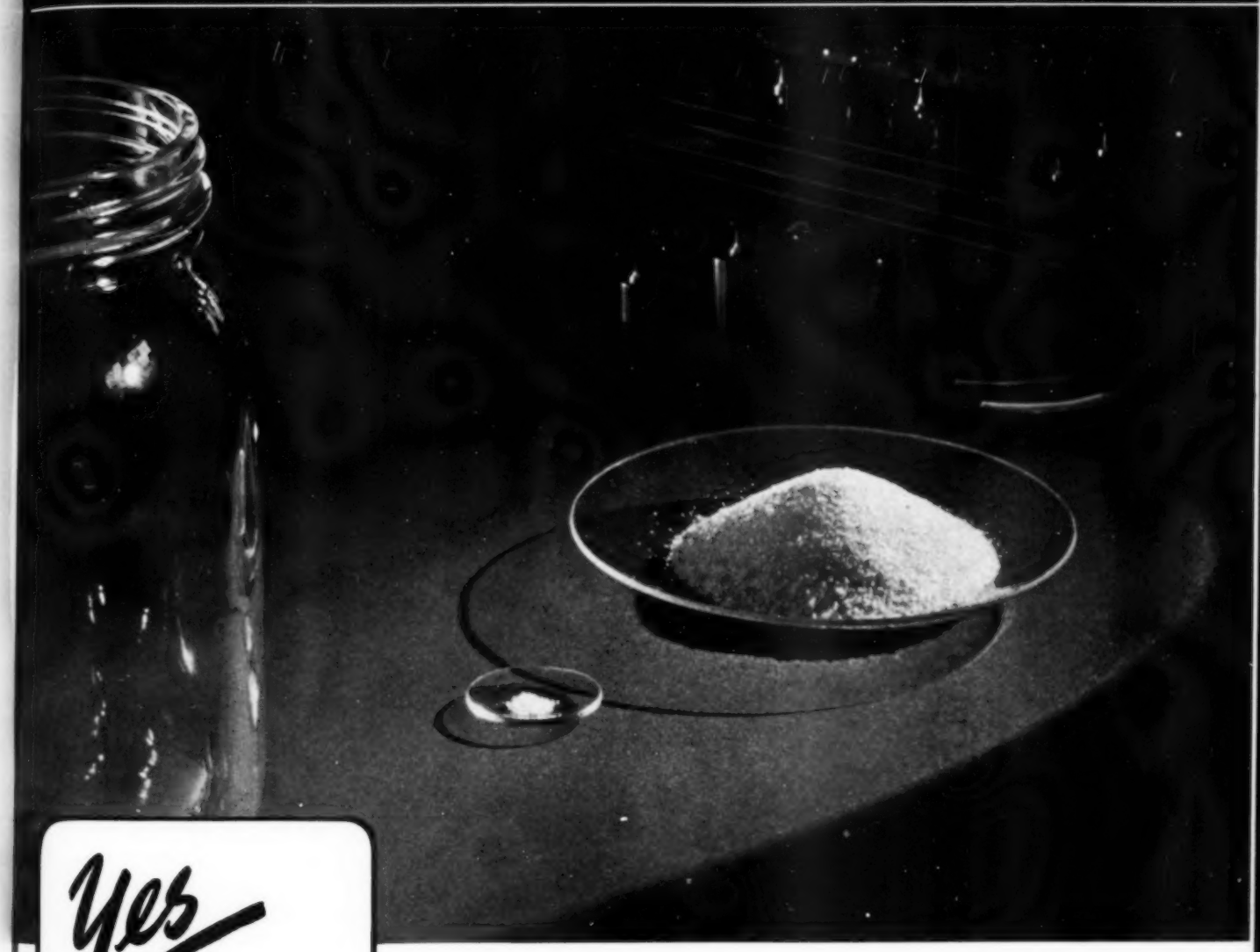
Norda

ESSENTIAL OIL AND CHEMICAL COMPANY, INC.

NEW YORK OFFICE
601 WEST 26TH STREET

CHICAGO: 325 W. HURON STRFET
LOS ANGELES: 2800 E. 11TH STREET
ST. LOUIS: 1123 WASHINGTON AVE.
FRANCE: PLACE VENDOME, 8, PARIS
ST. PAUL: 253 E. 4TH STREET
HAVANA, CUBA: SAN LAZARO #671
CANADA: 119 ADELAIDE ST., W. TORONTO
135 COMMISSIONERS ST., WEST, MONTREAL
ENGLAND: 17 CREECHURCH LANE, LEADENHALL ST., LONDON, E. C. 3

1 PART IN 2000 MAKES IT CLEAR



Yes THERE'S A DIFFERENCE IN GLASS

YOU may find it hard to believe that any ingredient of fine glassware must be measured in a quantity as small as *five one-hundredths of one per cent* of the entire batch. But it's true. For instance, as little as one pound of one material in a ton of glass can make that glass decidedly clearer, brighter, more brilliant.

Such careful measurement means that the production of fine glass depends, among other things, on fine, accurate control over the ingredients. As a rule, any of today's commercial glassware will have the clarity and brilliance you expect. You can take for granted that its ingredients have been weighed and mixed with care.

But the fact that only one pound of one ingredient in 2000 pounds of glass means better ware is important to you because it proves a point—that there is a *difference in glass.*

The difference is made up of things that are little in themselves—such things as composition, thermal shock resistance, brilliance, clarity, toughness. Together they can make the big difference in the containers you buy, the difference between ordinary glass and top-quality glass.

That difference is important.

The skill and care that go into the making of Armstrong's Glass are pictorially described in our new booklet, "Men and Glass." For your free copy, drop a postcard to Armstrong Cork Co., Glass & Closure Div., 3812 Prince St., Lancaster, Pa.

ARMSTRONG'S GLASS

and **ARMSTRONG'S CLOSURES**

UNLESS YOU MOVE FORWARD

From the millions of electrons whirling around the nucleus of the tiny atom, to the immense, gyrating planets of our solar system, everything throughout the universe is in continuous motion.

Motion alone does not necessarily mean progress, however. An object—or a business—may be constantly in motion, yet moving only within a fixed orbit!

Never having been content to merely travel in circles, we have constantly endeavored to be progressive in our movements. It is thus only natural that we should become adept in the art of prodding tomorrow's possibilities with the performance of today.

Because of our unremitting search for faster, more efficient methods of improving the basic techniques of glass making . . . and because of our effort to incorporate the newest processing discoveries in the finished product as quickly and economically as possible . . . Carr-Lowrey glass has long been the choice of many of America's foremost manufacturers of drug, cosmetic, household and food products. From more than 50 years' experience we have learned that while it's all right to be constantly on the move, ***you really don't get anywhere UNLESS YOU MOVE FORWARD!***

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD. *New York Office:* 500 FIFTH AVENUE *Chicago Office:* 1502 MERCHANDISE MART

COMMERCIAL SOLVENTS
Corporation
17 East 42nd Street, New York 17, N. Y.

Unsurpassed

IN PURITY, CLARITY, AND FREEDOM FROM FOREIGN ODOR

Sales Offices

BOSTON
50 Terminal St., (Charlestown)
Telephone: Charlestown 1140

CHICAGO
1817 W. Fullerton Ave.
Telephone: Lincoln 7121

CINCINNATI
49 Central Avenue
Telephone: Main 5139

CLEVELAND
1200 W. Ninth St.
Telephone: Cherry 2694

DETROIT
1900 E. Jefferson Ave.
Telephone: Fitzroy 2414

NEW ORLEANS
P. O. Box 1530
Telephone: Uptown 0027

NEW YORK
17 East 42nd Street
Telephone: Vanderbilt 6-1600

PHILADELPHIA
1600 Arch Street
Telephone—Bell: Rittenhouse 5931-32
Keystone: Race 7633

ST. LOUIS
818 Olive Street
Telephone: Chestnut 9656

SAN FRANCISCO
110 Sutter Street
Telephone: Exbrook 1611

Sales Agents

BALTIMORE, MD.
William McGill
311 East Falls Avenue

DALLAS, TEX.
Roy A. Ribelin Distributing Co.
1100 Cadiz St.

DENVER, COLO.
Chemical Sales Company
1125 Seventh Avenue

GRAND RAPIDS, MICH.
Krekel-Goetz Sales & Supply Co.
302-303 Houseman Bldg.

KANSAS CITY, MO.
John T. Kennedy Sales Co.
Southwest Blvd. and 26th St.

LOS ANGELES, CALIF.
Pitts & Loughlin
718 East 60th Street

LOUISVILLE, KY.
Thomas H. Gillessey
1278 Bassett Avenue

PORTLAND, ORE.
Van Waters & Rogers
2133 N. W. York St.

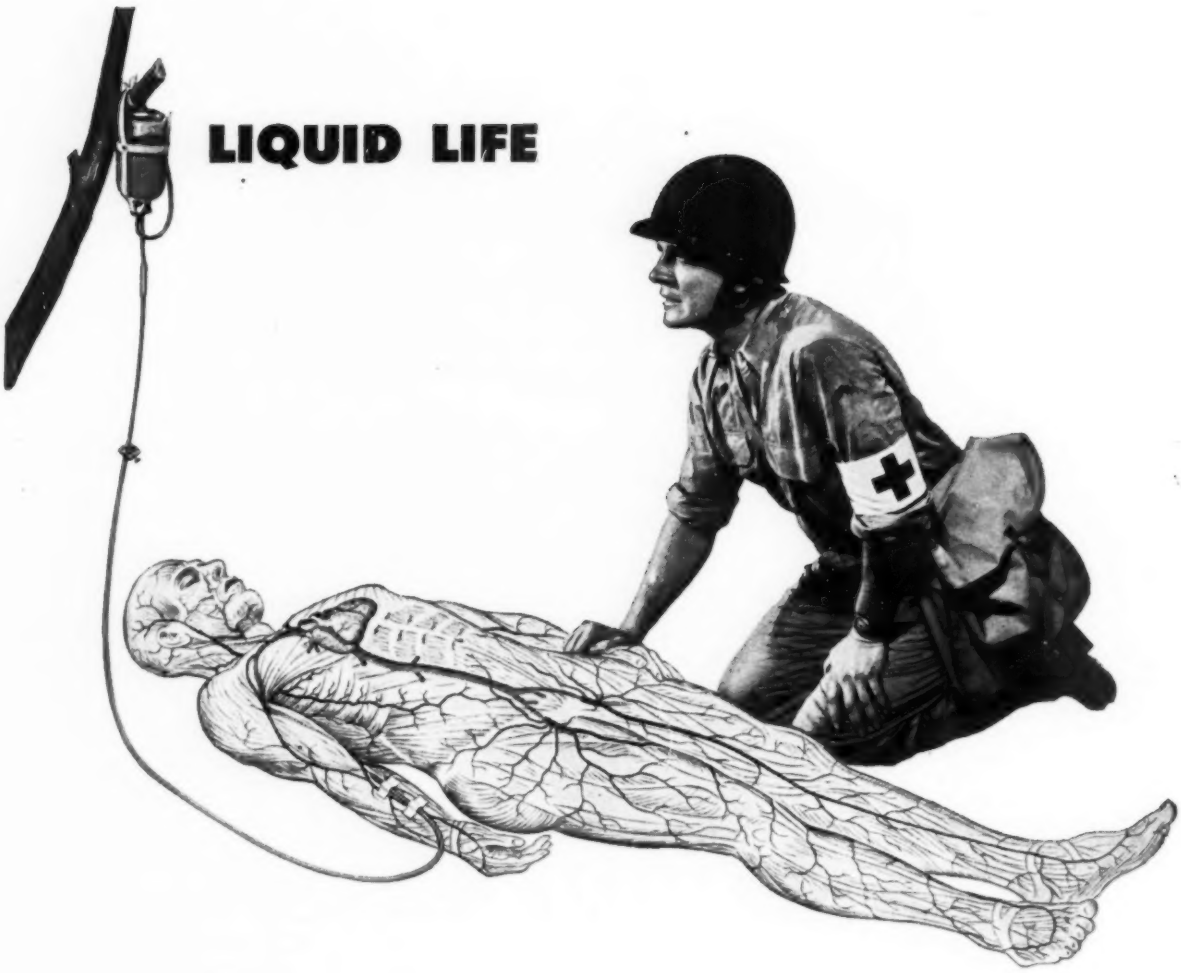
ST. PAUL, MINN.
Worum Chemical Company
794 Hampden Avenue

SEATTLE, WASH.
Van Waters & Rogers
4000 First Ave., South

SPOKANE, WASH.
Van Waters & Rogers
East 41 Gray Avenue

WINSTON-SALEM, N. C.
Milton B. Cash
110 Reynolds Bldg.

LIQUID LIFE



Not bullets, but *surgical shock*, has killed many a soldier in the wars of the past.

Shock is a breakdown of the blood circulatory system. Blood vessels contract. Circulation slows down, almost stops. If shock is too severe, death results.

Today, when a soldier is wounded, blood *plasma* is injected into his circulatory system. The plasma acts as a sort of pump primer . . . fills up the collapsed veins and arteries . . . starts the system working again. By thus counteracting shock, plasma saves lives and reduces suffering.

The whole blood you give at a Red Cross blood donor station goes through much processing before it gets to the front as plasma. At many points throughout the processing accurately-controlled *refrigeration* must be used.

To provide this refrigeration, General Electric has developed dependable refrigerating equipment that is more efficient, more compact and more flexible—to meet difficult war conditions.

This is only one of the many ways General Electric Refrigeration and Air Conditioning are helping to make a better world.

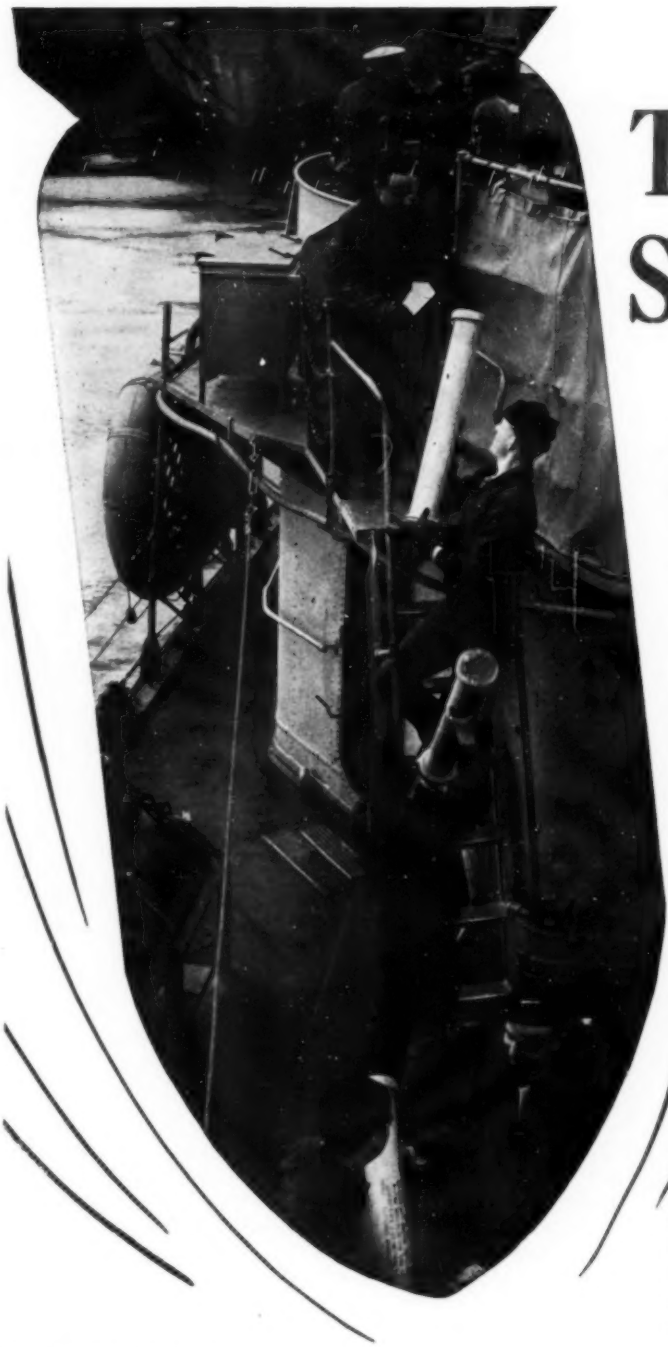
☆ BUY WAR BONDS ☆

General Electric Company, Air Conditioning and Commercial Refrigeration Divisions, Section 4312, Bloomfield, New Jersey.

Industrial Refrigeration by

GENERAL ELECTRIC

Hear the General Electric Radio Programs: The "HOUR OF CHARM," Sunday 10 P. M., E W T, N B C . . . "THE WORLD TODAY" News, Every Weekday 6:45 P. M., E W T, C B S



Official U. S. Navy Photograph

TROUBLE SHOOTERS

Trouble shooters are important these days on the business as well as on the military front.

Never have there been so many small details that needed attention in order to keep business running along smoothly.

Meticulous attention to detail and prompt attention to minor troubles and details as they come along are necessary to the proper function of the industrial machinery behind the war effort.

The composite business man is doing his share in the war effort in his daily conscientious attention to the new and ever increasing detail of today's business.

Products which are available to the perfumer at reasonable prices

OIL OF WHITE CEDAR
OIL OF CEDAR LEAF AMERICAN
Exceptionally Fine Quality
OIL OF BALSAM FIR AMERICAN
PHENYL ETHYL ALCOHOL
IONONE A. B.
IONONE METHYL
HYDRATROPIC ALDEHYDE
CYCLAMAL
PARA METHYL HYDRATROPIC ALDEHYDE
ALPHA AMYL CINNAMIC ALDEHYDE
INDOL
METHYL NAPHTHYL KETONE CRYSTALS
PHENYL ACETALDEHYDE DIMETHYL ACETAL
CINNAMIC ALCOHOL

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

Aromatics Division
GENERAL DRUG COMPANY

644 Pacific St., Brooklyn, N. Y.
9 S. CLINTON STREET, CHICAGO
1019 ELLIOTT ST., W., WINDSOR, ONT.

L CHRISTMAS L

GREETINGS

U U

E E

D

Best Wishes for the New Year

E E

EST. 1885

R R

S S

GEORGE LUEDERS & CO
NEW YORK
GL
REGISTERED TRADE MARK

GEORGE LUEDERS & CO.

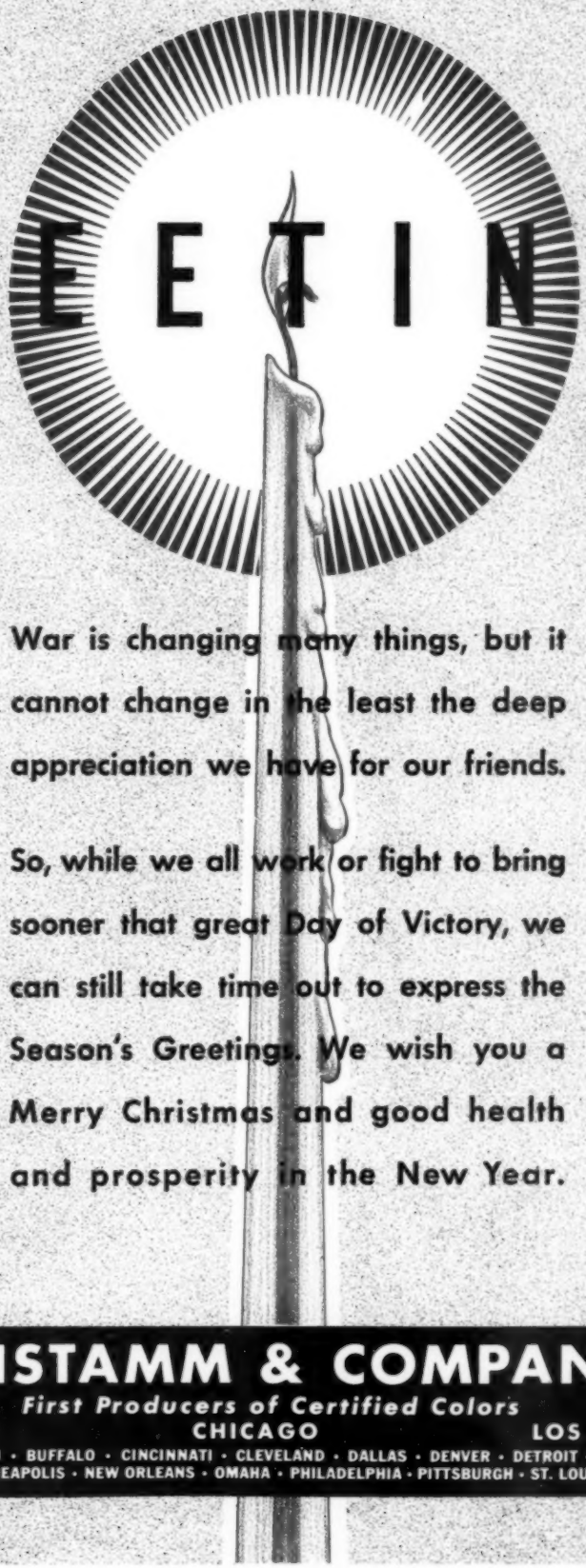
427-29 WASHINGTON ST. — NEW YORK

BRANCHES

CHICAGO · SAN FRANCISCO · MONTREAL

REPRESENTATIVES: SAINT LOUIS PHILADELPHIA

GREETINGS



War is changing many things, but it cannot change in the least the deep appreciation we have for our friends.

So, while we all work or fight to bring sooner that great Day of Victory, we can still take time out to express the Season's Greetings. We wish you a Merry Christmas and good health and prosperity in the New Year.

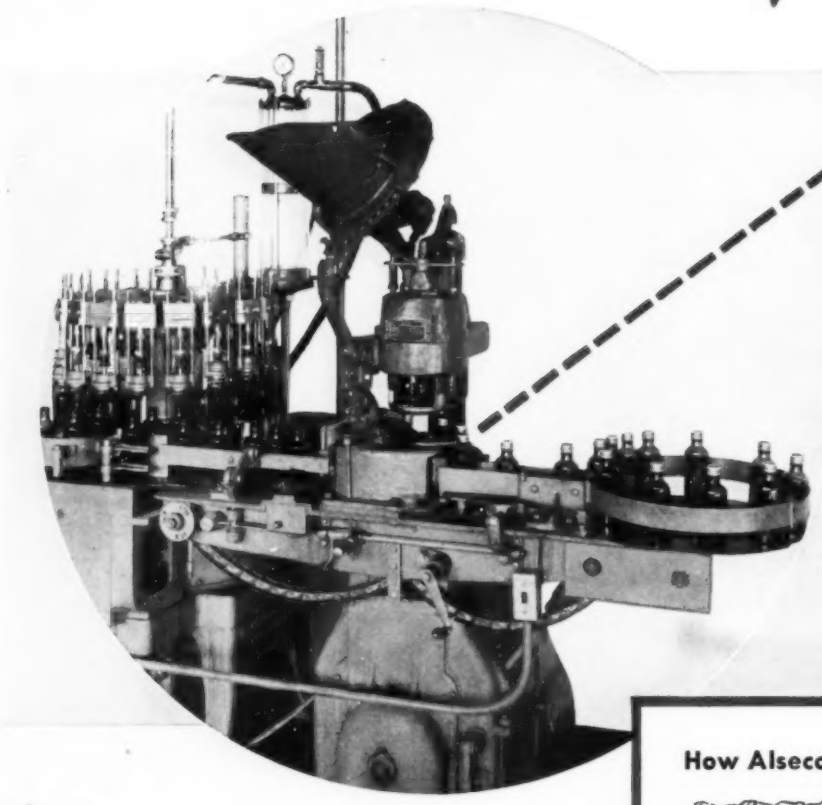
H · KOHNSTAMM & COMPANY, INC.

First Producers of Certified Colors

NEW YORK CHICAGO LOS ANGELES

ATLANTA · BALTIMORE · BOSTON · BUFFALO · CINCINNATI · CLEVELAND · DALLAS · DENVER · DETROIT · HOUSTON · INDIANAPOLIS
KANSAS CITY, MO. · MINNEAPOLIS · NEW ORLEANS · OMAHA · PHILADELPHIA · PITTSBURGH · ST. LOUIS · SAN FRANCISCO

Here's where to hatch *Hard-to-get Dollars*



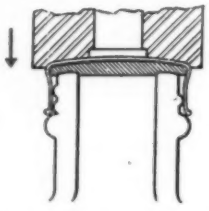
This Model AC Alseco machine, synchronized to the filler, seals and pilfer-proofs 60 bottles a minute, automatically.

Hard-to-get Dollars is just a realistic name for net profit. In the stimulated competition of peacetime, you may find that a really efficient sealing operation is important in snagging those much sought dollars.

Fast, efficient, automatic and foolproof, Alseco sealing machines keep down costs at their end of the line. They apply tailor-made Alseco Seals (see diagrams) in such a businesslike manner that they require little attention beyond filling the hopper from time to time. They reduce glass breakage and down-time to a minimum.

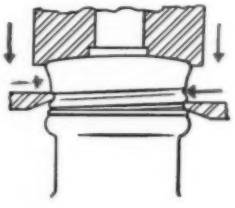
Look into the possibilities of Alseco sealing now so that you can plan ahead. We're on call with facts and figures.

How Alseco Seals are Tailor-Made



1. Plain-skirted Alseco Seal is uniformly seated. Under stationary top pressure, container lip is embedded in liner evenly all around.

2. While held in that position, threads are Rolled-On to conform exactly to threads on container. Each seal is tailor-made, fits perfectly.



Trade Mark Reg. ALSECO SEALS U. S. Pat. Off.

ALSECO

TAILOR MADE

SEALS AND SEALING MACHINES

ALUMINUM SEAL COMPANY • 7333 THIRD AVENUE • NEW KENSINGTON • PENNSYLVANIA

At your service 20 years of experience building quality seals and sealing machines

FOR A MERRIER CHRISTMAS IN 1944 BUY U. S. WAR BONDS AND STAMPS TO-DAY

CHICAGO • DALLAS • DENVER • NEW ORLEANS • LOS ANGELES
SAN FRANCISCO • SEATTLE • MONTREAL • TORONTO • VANCOUVER • WINNIPEG • MEXICO CITY

What's New at NYQ

"At NYQ plant—One of the many recent installations important in control of purity. Air conditioned equipment protects the product while manufactured, improves quality and has increased production and speed of deliveries."

To meet the tremendous demands for N.Y.Q. products created by war needs, the facilities of N Y.Q. have been expanded enormously. A large percentage of our production goes to our armed forces. We are doing, and shall continue to do our best, to supply as much N.Y.Q. material to normal consumer channels, as the exigencies of war will permit. And when peace comes, our friends in the trade will find the expanded facilities of N.Y.Q. an added guarantee of the reliability of N.Y.Q. products and service.

FOR VICTORY BUY UNITED STATES WAR BONDS STAMPS

NYQ

GENERAL OFFICES
99-117 North Eleventh St.
Brooklyn, N. Y.

ST. LOUIS DEPOT
915 Market Street
St. Louis, Mo.

Symbol of Quality

THIS NYQ LABEL CARRIES WITH IT SIXTY-EIGHT YEARS OF EXPERIENCE

ANTOINE CHIRIS

Antoine Chiris was established in France in 1768 and all through these years pioneered in the development of its long-known worldwide organizations. The American branch was established in New York in 1899.

CHIRIS

is prominent in

PERFUME BASES

AROMATIC MATERIALS

for

PERFUMES • COSMETICS • SOAPS

Long and persistent experience in research enables Antoine Chiris to solve your problems of replacement, substitution or adjustment.

ANTOINE CHIRIS COMPANY, INC.

115-117 EAST 23rd STREET, NEW YORK, N. Y.

SOLE DISTRIBUTORS IN NORTH AMERICA FOR

PIERRE DHUMEZ ET CIE — ETS ANTOINE CHIRIS, GRASSE, FRANCE — PILAR FRERES

ANTOINE CHIRIS, LTD., LONDON, ENGLAND

THE CHALLENGE OF CHANGING WARTIME PROBLEMS

is still being met by Du Pont Aromatics

DESPITE wartime difficulties, Du Pont has been able to meet most of the needs of the soap and perfume industry during the past year. The manufacture of aromatic chemicals has been increasingly arduous, but so far we have enabled perfumers to carry on.

The coming year may bring fresh problems for you and for us; but you can be sure that the technical resources of our Aromatics Laboratory will be working overtime, not only to provide the synthetics you need, but to maintain their complete uniformity, purity and consistency.

The Du Pont Aromatics research that led to the creation of many valuable products will continue to devise new and helpful solutions for tomorrow's problems as they arise.

Synthetic aromatics are a product of chemistry, and Du Pont Synthetic Aromatics reflect the skill of all the Du Pont laboratories. E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Aromatics Section, 40 Worth Street, New York 13, N. Y.

Du Pont Aromatics

DU PONT

BETTER THINGS FOR BETTER LIVING...*THROUGH CHEMISTRY*

Tony Weber says: "Kipling didn't know the half of it!" . . . . . .

"Say, if that guy Kipling who wrote all the stories and poems about India could see the old place today, he sure would open his eyes in wonder."

That's what Corporal Tony Weber says and he ought to know, because he's been in India for nearly a year with the 80th Fighter Group of our Air Forces - seeing things and doing things that are making history.

Tony Weber used to be a production clerk here before he joined the Air Force, and we hope it won't be too long before Tony and the other Swindell service men will be back on their peace time jobs - then we'll be able to give you that good, old-time Swindell service again. In the meantime, we're doing the best we can with what we have - and lying awake nights trying to figure out ways to do even better.

When you think of bottles think of

Swindell

Aladdin's Lamp

1943 A.D.

Almost as fast as it took Tojo to say, "So sorry,—Mr. Producer, no more Oil Cassia from China," the M M & R laboratories flung the answer back in Tojo's teeth by announcing IMITATION OIL CASSIA M M & R.

True, this was a product of the laboratory, *the Aladdin's Lamp of modern times*, but it was no story-book miracle.

The fortunate and timely introduction of this truly remarkable replacement was the result of months of difficult work, countless experiments, long hours of meticulous testing, and positive proving in actual usage by an interested group of diversified manufacturers.

Now M M & R is proud to offer Imitation Oil Cassia M M & R. Its Cassia characteristics are extraordinary and its flavoring strength comparable to the natural product so that it can be used pound for pound in your formulae. Important, too, is that it is priced at less than one-quarter recent quotations of Oil Cassia Redistilled U S P.

imitation
OIL CASSIA MM&R

To test Imitation Oil Cassia M M & R on a commercial basis, 10 lbs. is offered at the 100 lb. price. Free testing sample available.

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895...ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK CITY • 221 NORTH LASALLE STREET, CHICAGO

San Francisco: Braun, Knecht, Heimann Co. • Los Angeles: Braun Corp. • Seattle, Portland, Spokane: Van Waters & Rogers, Inc. • Canada: Richardson Agencies, Ltd., Toronto.

Service . . .

To the Trade Exclusively

For Quality

LIPSTICKS
CREAM ROUGES
EYEBROW PENCILS
CREAMS

COMPACTS { ROUGE, POWDER, MAKE UP
EYE SHADOWS
WATERPROOF MASCARAS
FACE POWDERS

In compliance with the Pure Food, Drug and Cosmetic Act and WPB Limitation Orders. Products Liability carried.

We also manufacture powder puffs, vanity puffs, loose sifter powder devices, etc.

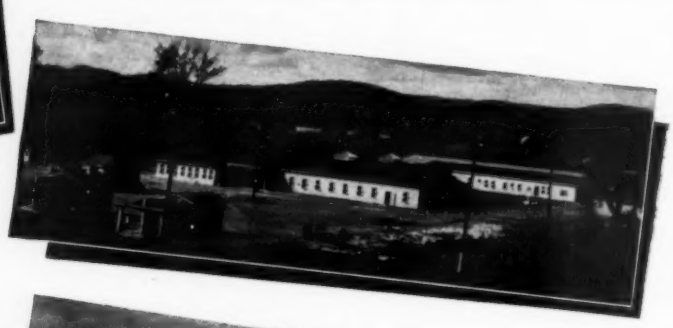
OXZYN COMPANY

MANUFACTURING
Cosmetics of Quality
SINCE 1877

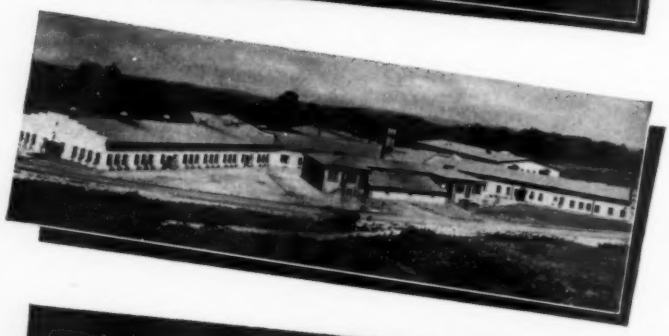
NEW JERSEY OFFICE
ONE PLEASANT AVENUE
CLIFTON

CANADIAN OFFICE
54 OSLER AVENUE
WEST TORONTO, ONTARIO

Your Answer...Here?



These 3 Modern Plants **are the largest facilities exclusively devoted to the disintegration of refractory metals and other materials.**



With the Finest Equipment **these facilities are busy today reducing magnesium to powder form for use in parachute flares, illuminating signals and tracer ammunition.**

Operated by highly skilled craftsmen Magna is turning out vast quantities of this vitally needed magnesium powder.

Under Rigid Control **...all production is tested and checked to maintain uniform high quality standards.**

And Tomorrow **will find Magna prepared to deliver finest quality metal powders in whatever quantities are needed to assure low cost quality fabrication. Management executives, sales, and design engineers are invited to consult with Magna *now*.**

MAGNA

MANUFACTURING COMPANY, INC.

MANUFACTURERS OF MAGNAFLAKE METAL POWDERS

444 MADISON AVENUE, NEW YORK 22, N. Y.

CALL
D & O

First for Reliability

Year in... year out... in peace
and in war... over a period of 144 years
Dodge & Olcott Company established
Quality as the cornerstone
of its policy.

Now as then... this policy continues
to enjoy the confidence of our
vast family of friends and customers
throughout the country.

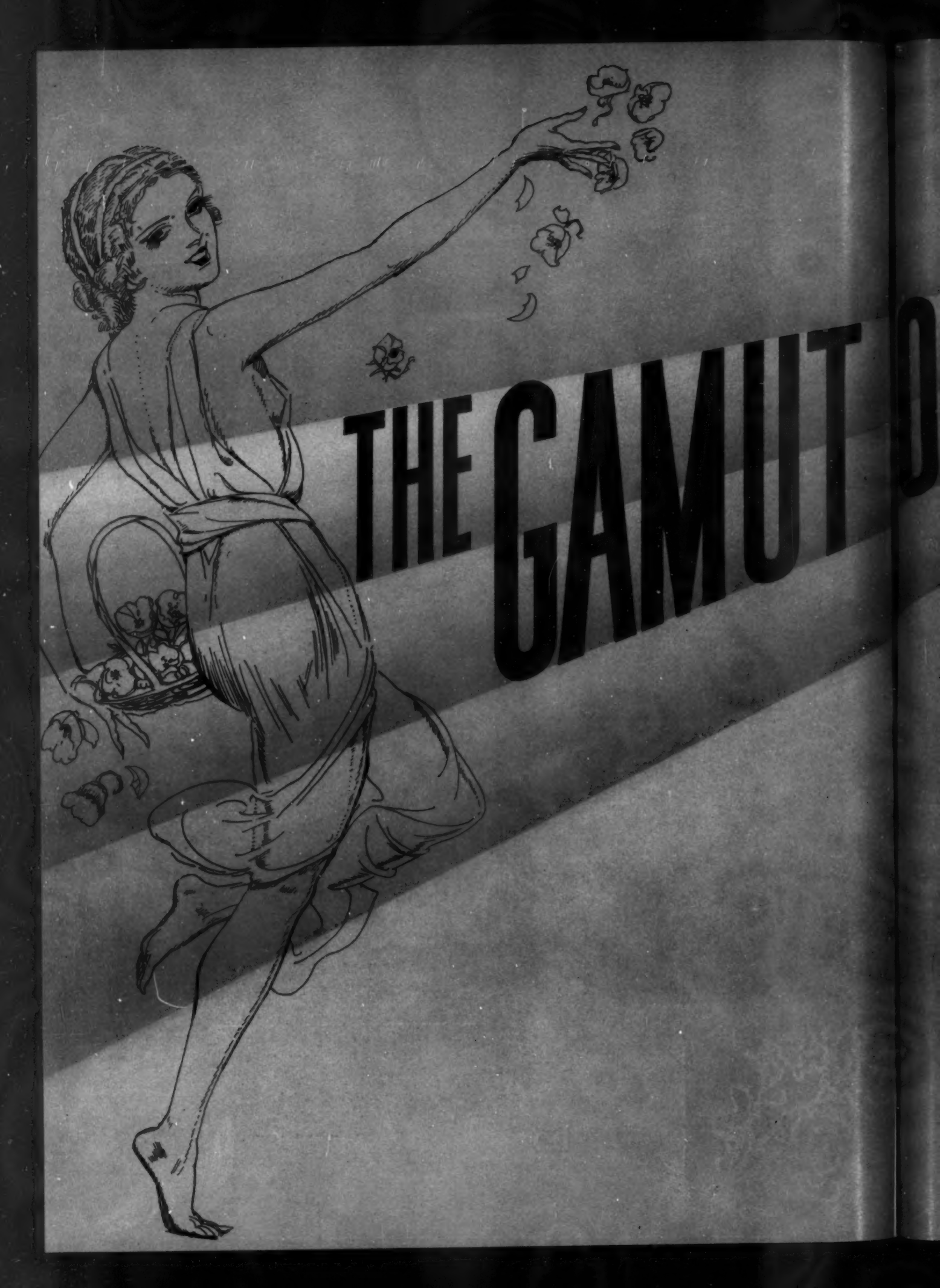
DODGE & OLCOTT COMPANY

180 VARICK STREET · NEW YORK, N. Y.

BOSTON · CHICAGO · PHILADELPHIA · ST. LOUIS · LOS ANGELES

Plant and Laboratories, Bayonne, N. J.

D.O


THE GAMUT

T OF FINE FRAGRANCES

Our chemists know how best to blend the perfume oils that meet with success — from odors delicate as the first crocus of spring to those that breathe the exotic redolence of the tropics. Their natural creative genius aided by a thorough knowledge of their profession produces sought after fragrances.

van Ameringen-Haebler, inc.

315 Fourth Avenue · New York, N. Y.

Christmas 1943 **dawns on a world at war**
... with men of Good Will fighting for Peace.

To some it might seem incongruous that under these circumstances one could wish his fellowman a happy Holiday Season. But Christmas is part and parcel of life in America... the holly wreath on the door, the stockings hung on the mantelpiece, the wide-eyed three-year-old as she sees her Christmas tree, typify that for which we are fighting quite as much as do the Four Freedoms. It is for us at home to preserve this cherished Yuletide Spirit for our children, and our children's children.

To a nation that is not merely willing to wish for Peace, but is ready to shed its blood, sweat and tears to achieve it, we extend our sincere Christmas Greetings... and add the hope that 1944 may see the realization of our objective. By another December 25th may there be Christmas trees and happy children once again in every country of the world.

To our customers we express our appreciation for their continued patronage. Particularly are we indebted to you for the patient understanding you have shown in the delays and disappointments necessitated by the demands of war. Our continued endeavor shall be to serve our country and our industry to the limit of our ability and facilities.

FINE CHEMICALS
Mallinckrodt
SINCE 1867

MALLINCKRODT CHEMICAL WORKS

76 Years of Service to Chemical Users

Mallinckrodt Street, St. Louis 7, Mo. • 74 Gold Street, New York 7, N. Y.
CHICAGO • PHILADELPHIA • LOS ANGELES • MONTREAL

KEEPING POSTED

A Different Law for Labor

THAT there is one law for labor and a different one for manufacturers in this country was made crystal clear by a *unanimous* decision of the U. S. Supreme Court last month. The decision, written by Justice Frankfurter, was with reference to the pickering of two cafeterias in Bronx Borough of New York City.

Justice Frankfurter said the pickets were justified in carrying placards alleging that the cafeteria proprietors were unfair to organized labor even though they had no employes, and he said it was not falsifying the facts to use the word facist as a criticism.

In the World Cafeteria case, Gus Angelos, John Harris and Lucas Harris ran the business without employes. Seeking to organize the establishment, one person at a time picketed with signs, tending, Mr. Frankfurter said, to give the impression that the cafeteria was unfair to organized labor and that the pickets had been previously employed in the cafeteria.

"These representations," said Justice Frankfurter, "were treated by the Court of Appeals as knowingly false, in that there had been no employes in the cafeteria, and the respondents were 'not unfair to organized labor.' It also found that pickets told prospective customers that the cafeteria served bad food, and that by patronizing it 'they were aiding the cause of fascism.' "

In the Cosmos Cafeteria case the pickets were found to have told prospective customers that a strike was in progress, and to have "insulted customers" who were about to enter. Elias Tsakires, Kallis Constantinon, and Christ Lymbouris were the proprietors here.

Mr. Frankfurter held that continuing unquestionably false representations and acts of coercion, are of course illegal, but in the two cases, he stated, the New York court transgressed State power.

"As we have previously decided," he asserted, "a State cannot exclude working men in a particular industry from putting their case to the public in a peaceful way 'by drawing the circle of economic competition between employers and workers so small as to contain only an employer, and those directly employed by him.' "

Just imagine a drug or cosmetic manufacturer trying to get away with statements as obviously false and detrimental as these in trying to present his "case to the public in a peaceful way." Since the decision was unanimous, it is obvious that the law itself is to blame.

Vitamin A Committee

AN ADVISORY committee composed of fishermen and producers of vitamin A concentrates is being appointed by OPA to advise on the prices of vitamin A concentrates. We doubt that such a committee will serve any useful purpose since the advisory committee on vitamins recently refused to discuss with the OPA the proposed regulation to lower prices on vitamin preparations below the prices that have been in existence since October, 1941.

Grade Labeling of Foods

THE heat is still being applied to Stabilization Director Fred M. Vinson to obtain grade labeling on canned goods, eggs, and other products. A number of organizations who were so active in the interests of grade labeling during the time that the Food, Drug, and Cosmetic act was pending in Congress, are active in the same direction right now. These organizations are:

American Association of University Women
American Home Economics Association
CIO Women's Auxiliary
National Federation of Settlements
Congregational Christian Churches
Beta Sigma Theta Sorority
United Automobile Workers
League of Women Shoppers
National Council of Jewish Women
National Consumers' League
Ladies Auxiliary of Brotherhood of Sleeping Car Porters
Alpha Kappa Alpha Sorority
National Congress of Parents and Teachers

Vitamins In Indiana

THE Board of Pharmacy of the State of Indiana has again issued a regulation prohibiting the sale of vitamin preparations in any stores except drug stores. It will be recalled that this same board issued a similar ruling in 1938 and that this original ruling was contested by the Kroger Grocery and Baking Company. In this suit, the Marion County Superior Court prohibited the board from enforcing the ruling. But on an appeal, the Supreme Court of Indiana ruled that the Marion County Superior Court, for lack of jurisdiction, had no right to issue a declaratory judgment against the Board of Pharmacy, but the ruling did not definitely uphold the regulation of the Board of Pharmacy.

Now the Board of Pharmacy has issued a similar regulation which is, for all practical purposes, identical with the original ruling. The new regulation is called Ruling No. 52, and although it is said to have been prepared on March 24, 1943, it was not released by the Office of the Attorney General of Indiana until September, 1943.

Pertinent paragraphs from the ruling follow:

"The public is urged to remember that vitamins in concentrated form are unnecessary to the individual receiving a properly balanced diet and that proper food is the best source of necessary vitamins. It is up to a physician to decide if and when vitamins are needed for the treatment or prevention of disease, and in such cases the concentrated vitamins in the usual capsule form in proper dosage may be prescribed, and, of course, in such cases they are drugs.

"So that there may be no misunderstanding in the public mind as to the type of vitamin preparation which is being offered for sale, concentrated vitamin preparations which are sold exclusively as foods or food accessories and the labels of which bear no directions for use in the prevention, mitigation or cure of disease must be labeled 'Not for Medicinal Use' on the principal label thereof. Otherwise they will be considered as coming within the classification of drugs and medicines within the meaning of the Pharmacy Act.

"If the product is sold as a drug or medicine for the prevention, mitigation, or cure of disease, it is, of course, a drug, and under the provisions of the Indiana Pharmacy Act such products can be sold only by or under the supervision of a Registered Pharmacist.

"Nothing in this statement of policy is to be construed as relieving any producer or distributor of vitamin products in interstate commerce from full compliance with all requirements for labeling under the Federal Food, Drug and Cosmetic Act and Regulations."

Micro-Wax Control

THE Petroleum Administrator for War now has control of the sale and distribution of micro-crystalline wax, and Petroleum Distribution Order No. 19 has been issued covering this product. Under the terms of the order, persons who require more than 3,000 pounds of wax in any calendar quarter must apply to the Director of Marketing, Petroleum Administration for War, Interior Building, Washington 25, D. C. using form WPB PD-2945.

Deliveries of permitted quantities in any calendar quarter must be spaced in equal monthly deliveries except that such quantities may be exceeded if necessary to fill a container ordinarily used to deliver such quantities of wax.

Micro-crystalline was is defined in the order as follows:

"Micro-crystalline wax, commonly known as amorphous wax or petrolatum wax, means a solid hydro-carbon mixture of molecular weight averaging higher than paraffin wax, possessing plastic properties, separated entirely from that part of crude petroleum commonly designated as heavy lubricating and cylinder oil stocks, and having a minimum kinematic viscosity of 5.75 centistokes at 210° F. and a maximum penetration of 60 at 77° F., determined by A.S.T.M. method D5-25."

Vitamin Makers Seek OPA Injunction

THE threat of the OPA to set maximum prices for vitamin products below those prices that are now in existence has been taken into court by thirteen leading ethical and other manufacturers of vitamin products. The action has been filed in the District of Columbia Court, and asks for an injunction against the OPA. The companies state in their petition that prices of vitamin products have not risen nor threatened to rise, but have tended to decline since October 1, 1942. They declare that such a regulation by the OPA would cause the companies to "suffer irreparable loss."

The maximum price regulation, the companies say, would unlawfully curtail their products. Large sums would have to be spent in marking stock on hand, opening packages, and fixing maximum price labels on the contents, and expensive surveys would be necessary. "In addition," says the petition, "the plaintiffs will never be able to reinstate present prices once they are reduced as the result of any price regulation or order, even though ultimately set aside as invalid, owing to the fact that such reinstatement of prices would cause plaintiffs to lose the goodwill of the public in general, and of their regular customers in particular."

The companies entering the suit are: Abbott Laboratories, Eli Lilly & Co., Winthrop Chemical Co., International Vitamin Corporation, Carroll Dunham Smith Pharmacal Co., Oxford Products Co., Upjohn Company, Vitamins Plus Division of Vick Chemical Co., United Drug, Inc., E. R. Squibb & Sons, William H. Rorer, Parke, Davis & Co., and Standard Brands, Inc.

The proposed regulation was submitted to the advisory committee of the vitamin manufacturers during the first part of November. At a meeting held some two weeks later the advisory committee said that the OPA had no authority to reduce prices below October, 1941 level, particularly if there had been no price increases since that time. The committee refused even to discuss the proposals embodied in the regulation. Indications were that high OPA officials would sign the order if those actually working on it could support OPA's position through a strongly worded statement of considerations, despite the fact that the regulation would lay OPA open to the charge that it is directly seeking to control profits instead of prices. Hence the manufacturers resorted to court action.

The district court of Columbia dismissed the above mentioned suit, but appeal was taken to the District of Columbia Circuit Court of Appeals and the OPA agreed to hold up issuance of any order until the appeal was decided.

The dismissal of the suit, according to Judge Bailey, was not based on the merits of the case, but he ruled in favor of the OPA because he had no jurisdiction in the case due to the Emergency Price Control Act. This Act stipulates that no Federal, State or territorial court shall have jurisdiction or power to consider the validity of an order or price schedule or to stay, enjoin, or restrain the issuance of such a regulation. An Emergency Court of Appeals is set up under the Act to take jurisdiction in matters concerning the validity of price orders.

Basil O'Connor, attorney for the vitamin producers, argued that the injunction was being

sought under the laws of equity and not under the Emergency Price Control Act. The relief was being sought, he argued, to enjoin the OPA from exceeding its powers under the Act.

OPA's argument for dismissal was based primarily on the following points: The suit is against the United States and the United States has not consented to be sued; on the grounds that the District Court lacked jurisdiction because such jurisdiction is denied by the Emergency Price Control Act, and on the grounds that the plaintiff was seeking relief solely on the basis of a hypothetical situation which cannot be shown to have developed and "which may never develop." OPA also claimed that the vitamin producers illegally used in their motion information that was unlawfully obtained under the Emergency Price Control Act.

South American Business

ALTHOUGH our Government is making a great fuss about the development of South American business to be continued after the war, there are a great many skeptics who well remember the situation that followed the last war. As one drug manufacturer described it: "As soon as peace was declared, smart Britons were taking the boats to Germany to try and obtain agencies for drug and other products for the South American territory."

American drug and chemical manufacturers on the whole do not have much faith in any great post-war market in the countries that lie to the South of us. Americans are being offered plenty of business from these countries merely because supplies cannot be obtained from other countries. But once the war is over and these old suppliers are again able to ship supplies, the American products will be forgotten.

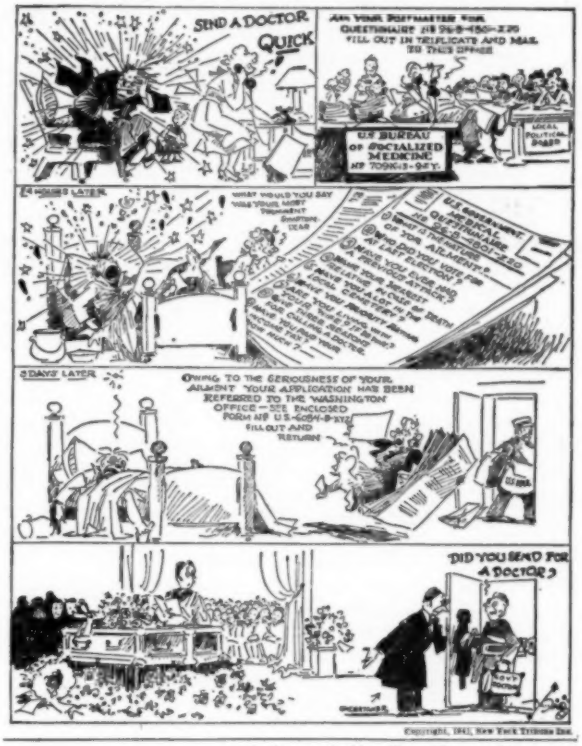
However, this is not the way that Washington and the Bureau of Foreign and Domestic Commerce are talking. They want manufacturers to work hard in an attempt permanently to establish American firms and their products in the Latin-American countries so that when the war is over, the former suppliers will not be able to oust the American exporters to South and Central America.

The situation in export is not different than it is in the case of domestic business. All manufacturers are being besieged for goods on all sides by people who never gave them any business before. The manufacturers know very well that once the war is over extremely little of this business will be retained as these new customers will return to their old suppliers who will be able to take care of them adequately at that time. Once the war is over and goods are free again, price and speed of delivery will be the main considerations and nothing will take their place. Therefore, while enough additional business to take up the slack that most manufacturers have in normal times is desirable, it is nothing to get unduly excited about and it is nothing to count on in the future. It is the feeling of many manufacturers that South American business must be viewed in the same light.

Alcohol Order Eased

THE WPB ethyl alcohol has again been amended. Under the terms of the amendment, the quantity of alcohol which may be withdrawn, subject to the restrictions of the order, without application to WPB but merely by filing a certificate with the supplier, has been increased from 3,500 gallons per quarter to 7,900 gallons per quarter. The fifty per cent restriction on the purchase and use of alcohol in cosmetics remains unchanged, but the amendment provides that any person who purchased alcohol prior to July 1, 1943 in quantities not exceeding 162 gallons a quarter, or one drum a month, for the manufacture of cosmetics, may continue to do so.

When the Government "Socializes" Medicine


SEND A DOCTOR QUICK
U.S. BUREAU OF SOCIALIZED MEDICINE
2 DAYS LATER
OWING TO THE SERIOUSNESS OF YOUR AILMENT YOUR APPLICATION HAS BEEN REFERRED TO THE WASHINGTON OFFICE — SEE ENCLOSED
FILL OUT AND RETURN
DID YOU SEND FOR A DOCTOR?

—*Darling in the* NEW YORK HERALD TRIBUNE.

Sugar Re-Registration

OPA is simplifying its procedure in an attempt to streamline its rationing regulations and administrative procedure. Therefore, there will be a new registration of users of industrial foods (including sugar). This registration, taking place this month and extending into January, 1944, will bring the following benefits to the industry as well as to OPA:

Allotment periods under the various food rationing orders will be made to coincide. Instead of two, three, and four month periods, as has been the case, allotment periods will be calendar quarters. Therefore, industrial users will be able to apply for and receive allotments of all rationed foods at one time and can plan accordingly.

The industrial use provisions of the food rationing orders are being rewritten in simple English. The provisions will be more understandable and inconsistencies will be reconciled.

Industrial users who petition the OPA for adjustment or relief will be assured of prompter and uniform handling of their requests. Heretofore, a manufacturer desiring readjustment under each

of the programs has been compelled to petition separately for additional amounts of each food.

As a result of the re-registration, it will be possible for the OPA to obtain a more complete tabulation of base use of rationed foods for the purpose of relating the distribution of foods to the actual needs of the industry.

The new form, because of its more definite use classification, eliminates the necessity of users compiling breakdowns of base use when filing applications for supplemental allotments.

When re-registering, a manufacturer is given the option of registering all of his establishments together or each one individually. This will permit a manufacturer having more than one plant to adapt the regulations to his own needs.

Glass Container Outlook

THE latest information from WPB on the glass container situation does not offer this industry anything to cheer about. At a recent meeting in Washington of the advisory committee, it was recommended by the industry that restrictions be continued since demand showed no tendency to slacken and the industry is now in an oversold condition. Even with the 65 per cent limit on consumption ordered by WPB, the industry pointed out that manufacturers have not been able to meet their orders. Therefore, even if demand continues at the same level, the industry will still be far behind. Furthermore, inventories have been cut to a minimum, being about 41 per cent below the levels of last year, leaving no cushion to fall back on.

The chief problem in production of glass containers is the shortage of labor. As production is stepped up to 100 per cent, more manpower is necessary. However, many of the plants are located in areas where the labor shortage is already acute. The industry has also been hard hit by the fuel shortage. Also, although up to the present raw materials were no problem, supplies of soda ash are tightening up considerably. The final problem is that of obtaining shipping cartons in which to ship the glass containers after they are made.

For the twelve months ended October 31, 91,736,000 were shipped, showing an increase of 19.6 per cent over the previous year. Indications are that the productiou during November and December are higher than last year, indicating that the yearly production is now 93,000,000 gross. Although this represents a substantial gain over 1942, it is not generally believed that this rate of production can be maintained in 1944 due to the problems enumerated above.

Alcohol from Cuba

ALTHOUGH a directive was understood to be ready to be issued in the latter part of November preventing the importation into this country of gin and potable spirits from Cuba, the plan to issue such a directive is said to have been abandoned. The reason why the directive was anticipated, was that this country needed the Cuban molasses for the production of alcohol in this country for use in the war effort. But since this country only offered 5⅝ cents for this molasses, against 13.6 cents paid for last year's molasses, the Cubans proceeded to turn the molasses into gin and potable spirits which could be shipped into this country not only to alleviate the shortage of domestic gin, but also to stretch our small liquor supply by blending. Needless to say this method of disposing of their molasses was much more profitable than selling it to this country at 5⅝ cents.

The directive was talked of as a method of getting the molasses at a low price, since if importation of gin and potable molasses into this country was prohibited, the Cubans could either convert it into alcohol for motor fuel at a price of 35 cents a gallon or else sell us the molasses at our price. When the directive was held up, many were of the opinion that the reason for this delay lay in the Congressional investigation into the shortage of liquor. However, it is now reported that the Secretary of State considered that any such directive would be against the good-neighbor policy.

Doctor Praises Laxatives

DESPITE the fact that laxatives of practically all kinds have been repeatedly damned by ever so many doctors and by health writers of all kinds, laxatives continue to be used in very large volume. Now none other than Dr. Walter C. Alvarez, of the Mayo Clinic, gives laxatives a clean bill of health and indicates their usefulness in his latest book, "Nervousness, Indigestion, and Pain." Dr. Alvarez says:

"*Laxatives.* Laxatives constitute often the most convenient form of treatment for those many persons who, because of a low degree of intelligence, poverty, an irregular life, or lack of good toilet facilities, will not or cannot diet or take daily enemas. I doubt if laxatives ever do any serious harm to anyone.. At worst, probably, they upset digestion and cause flatulence. I have seen many an old man or woman who apparently was none the worse for taking a cascara or aloin pill every night for many years. I would hate to start a child to using laxatives, but I see no objection to their use by old people. I think laxatives might work better if they were to be used only two or three times a week rather than every day. When a pill has cleaned the colon out there is no logic in taking another that night.

"The great trouble with the use of laxatives by some persons is that they act too much one day and too little or not at all the next. A good laxative for some women with a sensitive colon is calcined magnesia which can be taken in doses of 1 or 2 teaspoonfuls in the morning. If its action should prove to be uncertain better results may be obtained with one of the many combinations of phenolphthalein, cascara, aloin and bile that are to be found on the market. Sodium phosphate is a mild saline laxative which can be taken most conveniently in an effervescent form and in a dose of from ½ to 2 teaspoonfuls.

"The mildest of the anthracene laxatives is cascara. Another useful drug of this type is aloin. It is said to have the advantage of a constant, even action which can be depended on day in and day out. Perhaps the commonest laxative used today is phenolphthalein. It is cheap and tasteless and its action is fairly mild. The dose for an adult is from 1 to 3 grains. One finds it in many proprietaries such as Cascarets, Veracolate, Caroid and bile, and even Agarol. Dry bile in the form of 5 grain pills is laxative, but its action is uncertain."

Dropping Proprietary Ads

DUE to the paper shortage, magazines and newspapers are obliged to curtail the amount of advertising that they print. And due to this curtailment in all publications, manufacturers and their advertising agencies are having difficulty buying the amount of advertising space that they desire. And because the trend toward larger advertising budgets has increased, the pinch is worse that it would be if the paper shortage were the only factor involved in the situation.

Advertising agencies naturally want to place all the advertising for their accounts that can possibly be placed, since if the more they are able to place the greater will be the commissions that they will earn. This is the reason why new advertising accounts will bob up in a very large number of publications.

But the peculiar part of the situation is that certain publications are becoming very choosey about the type of advertisements that they will publish under the present circumstances. One large Sunday supplement appearing with a chain of newspapers throughout the country is reported as planning to "cut out many proprietary ads in order to have more room for foods, etc."

This strikes us as a rather high-handed method of conducting business during trying times. The method followed by most businesses is to ration old customers to a percentage of available goods, and not take on any new accounts unless the old customers are able to get their normal requirements. Any system that plans to cut out certain old accounts and take on new ones is not a system that will benefit the user of the system in the long run. Not that we mean to defend all of the proprietary medicine advertising that we have seen, but if a publication took proprietary medicine advertising before the squeeze, we see no reason why a preference should be given to foods at the present time. After all, when the slump comes,—as it most surely will—the new food accounts will quit and go back advertising where they advertised before, and the proprietary medicine people might not come back at all.

Merck Wins Award Again

CONSIDERING the fact that Merck & Company is being sued by the United States Government for an agreement with E. Merck Chemical Works of Darmstadt, Germany in 1932, and is accused in this suit of attempting to protect the South American market for E. Merck in the post-war period, it is interesting that the three plants of Merck & Co. have just won the Army-Navy Production Award for the second time. Particularly interesting is the letter addressed "To the Men and Women of Merck & Co., Inc.," by Under Secretary of War Patterson which contains the following:

"I am pleased to inform you that you have won for the second time the Army-Navy Production Award for meritorious services on the production front.

"You have continued to maintain the high standard that you set for yourselves and which won you distinction more than six months ago. You may well be proud of your achievement. The white star which the renewal adds to your Army-Navy Production Award Flag is the symbol of appreciation from our Armed Forces for your continued and determined effort and patriotism."

After reading this, the people of Merck & Co. should realize that they are doing the things that count, and any home front messing around by politicians of various views and various colors will be properly taken care of after the main fight has been won.

Pharmacy and Manufacturers

WE ARE pleased to see that the number one item on the program of an all-inclusive public relations undertaking for the drug industry is the maintaining of an adequate supply of well qualified pharmacists for the post-war period. The group in charge of this undertaking plans a program for popularizing pharmacy as a profession to be directed at the public at large by informing the public of the services rendered by pharmacy, and to potential pharmacy students for the purpose of obtaining more and better students for pharmacy colleges. In addition, a survey of educational procedures will be made, including examination of the curricula of pharmacy colleges in cooperation with a committee appointed by the American Association of Colleges of Pharmacy, the National Board of Pharmacy, and the American Council on Pharmaceutical Education.

It will be recalled that we directed attention to the problem of the need for pharmacists in our September issue. Certain professors of pharmacy colleges found fault with the article that we published, while other professors and many manufacturers liked the article even though the article placed the blame for the unattractiveness of pharmacy as a profession largely upon the manufacturers. However, regardless of any criticism that we may have suffered, we are glad to have brought this pressing problem to the attention of the industry, and we are particularly pleased that the manufacturers and organized pharmacy are getting together and trying to do something about it.

E. Walton Bobst, of Hoffman-LaRoche is chairman of a committee of five in charge of the undertaking, and additional supporters from the industry will be enlisted.

Penicillin for All

NEVER has any drug received the favorable publicity that has been given to penicillin both in the professional and lay press. And never has the production of any drug been pushed ahead with such rapidity, especially in a time of a national emergency when all materials are critical due to the hugeness of the war effort. Not only has production of penicillin been pushed to a point at which our Armed Forces fighting all over the world will have adequate supplies, but by late Spring of 1944 it is anticipated that the output of this product will be sufficient to care for the entire civilian demand of this country as well as the enormous demand for the Armed Forces. Considering the difficulties that faced producers of this product, this result is remarkable achievement. It indicates clearly what the drug industry of this nation can do when given the green light to go ahead.

THE INDUSTRY AND ITS CRITICS

Perhaps the outstanding difficulty that this industry has to face is the criticism of the products of the industry by all manner of people who, most of the time, are not fully informed on the subjects to which they address themselves. Thus writers on health will warn against the use of particular types of products of this industry, many times quoting physicians who were very little informed more than the one who is quoting them. In the field of therapy one would think that the doctors would realize how often it is that a particular treatment discarded at a particular time for some new advanced method, has been welcomed back by the physicians as the proper treatment after all.

Unfortunately for this industry, types of products develop into fads on the part of the public and everyone thinks at about the same time that all their ills and pains will disappear if they take the particular type of product that is in vogue at that time. We all know well of the tonics of the past—some of which improved the patient's feeling of well-being by means of a rather high alcohol content. These products were later discarded due to the fact that they were damned on every hand even though the alcohol might have had some beneficial effect through some action such as lowering the blood pressure which the Rockefeller Institute later proved it did despite the fact that all doctors and almost every one else stated that alcohol raised the blood pressure.

Laxatives are a case in point. The talk of removing waste from the colon has much to recommend it and the type of laxative which people use during a certain period of time often constitutes a fad. Thus within our memory we had the Bulgarian bacilli fad, the mineral oil fad, the phenolphthalein fad, the mineral oil-agar-phenolphthalein fad, the psyllium seed fad, and others. Now most of these products have found their proper places, most of them being used to a large extent today.

The unfortunate part of all of these discoveries is that the public at large seeks out anything new in medicine in the hope that it is the one thing that they have all needed to keep them feeling on the top of the world at all times. Thus they have rushed to different types of alkalizers because they came to the belief that their upsets, headaches, and other uncomfortable experiences were due to an acid condition. Any new product placed on the market that obtains a foothold is bound to experience a real growth in consumption as "one man tells another." The product must be an efficacious product or it will never obtain a foothold. After it has experienced its rise in sales, it will settle down to a normal level for a long period after until newer products arise to displace it to a large extent.

Vitamins are now the outstanding fad and this industry is being blamed by many physicians and by many others in the country for promoting the consumption of these products to the extent to which they have promoted them. We fully agree that many more vitamin pills and tablets are used than are necessary. The public is vitamin-conscious to say the least, and almost every other person is taking some form of vitamin products and they just know that these products make them feel better.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, and mouthpiece for organized medicine in this country has been doing some talking on the "Use and Abuse of Vitamins," referring to these products as the "substitutes for the tonics and potions of the past." It must be recalled at this time that vitamins have been up scientifically through use by members of the medical profession and the large vitamin producers have been, and still are the large ethical houses of the country who work closely with the Council on Pharmacy and Chemistry of the American Medical Association and who build up the sale for their products solely by the detailing of physicians.

Therefore, it is the doctors of this country who are responsible for the large public demand for vitamin products. We do not mean to deny that vitamins were not exploited by houses in the proprietary medicines by advertising direct to the public, but these products advertised to the public differ from those of the ethical houses only as to the matter of potencies of some of the

This industry and its products are constantly under attack by self-appointed critics. Now the criticism is being directed mainly at the large sale of vitamin products, although other drug products as well as cosmetics are not escaping these attacks.

ingredients and in the matter of price. Of course the physicians will say that vitamins should not be taken indiscriminately but should be prescribed by a physician. Unfortunately for the medical profession, however, the products have in no way been proven harmful, and apparently there is no reason why the public should not consume them if they so desire. Undoubtedly a very large majority of the people who take these products are benefited by them so there is good reason for their manufacture and sale.

But the peculiar part of the criticism of the products of this industry is that almost anyone will venture forth even though he is just about completely unqualified. And the public is just about as gullible about taking these criticisms to heart as it used to be about believing some of the exaggerated claims that were made for some products of this industry before the Government took over control of label statements and advertising claims. The public goes strongly for anything that tells them how to keep their health, just as they go strongly for any new product that they believe will keep them feeling top-notch.

The same set of conditions obtains in cosmetics as in drugs and medicines. All manner of people criticize cosmetics whether or not their criticisms are well founded. Even the medical profession—particularly the dermatologists—desire to have the last word on what type of cosmetics should and should not be used. The American Medical Association has allowed certain cosmetic manufacturers to advertise their product in the Journal of the American Medical Association and thus these products have the blessing of organized medicine. These manufacturers who are thus honored hope that the physicians who receive and read the Journal will be impressed by this advertising and will mention the names of these manufacturers to their female patients as well as to their own families.

But it is peculiar how often it happens that when any cosmetic is built around a scientific discovery that has to do with the health of the skin, the medical profession —which more often than not is not identified very closely with the product—will go to town to disprove the product before it is well established. And the fear that department stores and other sellers of cosmetics have of a new cosmetic proving dangerous, makes this criticism by the physicians a very lethal weapon. Only recently we saw a promising new cosmetic that was starting to get real repeat orders in certain parts of the country, kicked out of some of the leading department stores because of a one-sided criticism written by a man who himself could not possibly be acquainted with the true facts. The manufacturer was then called upon to put on a scientific demonstration in a prominent hospital for the officials of these department stores.

How the industry is to defend itself against these tactics is something that we do not assume to be able to answer. All that we can say is that the manufacturers in the industry should be most careful in their claims and not let the advertising department attempt to oversell their products. Conservatism in this regard must be the watchword of both manufacturers of both drugs and cosmetics if manufacturers want to keep this criticism from being aimed directly at them. Furthermore, exaggeration in the exploitation of products gives these self-appointed critics that want some popular subject to talk or write about the opportunity to point to specific manufacturers and their products as horrible examples, and this does not do the manufacturers or the industry as a whole any good. For if the products of this industry are efficacious, and do accomplish the results claimed for them without exerting any harmful influence, then the critics will be proven wrong and the public will no longer have any faith in them. The industry should not hesitate to make the claims which the manufacturers know are justified and which the manufacturers can prove. There should be no lessening of trying to sell more of the products of the industry if the manufacturers continue to offer products which will improve the health and well-being of the people at large.

POST-WAR RECONVERSION

Every business man is wondering what conditions will be like when the war is over. One of the determining factors is the extent of reconversion to the production of peace-time goods, and the length of time this reconversion will take.

IN THE midst of the stress of trying to produce all that is possible during the abnormal conditions of war time, business men are naturally wondering what conditions will be like when the war is over and this enormous demand for war goods is at an end. As part of the post-war picture, the question of reconversion is of prime importance. How many of the present plants will be reconverted to the production of peace-time products, and how long will this reconversion take?

A partial answer to the question is provided by a survey recently made by the National Industrial Conference Board. This survey shows that four out of every ten firms questioned are planning one hundred per cent reconversion of plants and productive facilities. About forty-five per cent of the non-durable goods firms answering the questionnaire, and about thirty-nine per cent of the durable goods firms contemplate complete reconversion of war facilities, with steel, electrical equipment, petroleum, shoes and leather, and textile companies prominent in these categories. Reconversion of more than half of their plants and facilities is contemplated by fifteen per cent of the companies surveyed. Outstanding in this group are firms in the automotive, machine tool, and office equipment industries. About six per cent of the reporting companies, including concerns in the chemical and metal products industries, intend to reconvert less than half of their war-time facilities.

Writing in the "Magazine of Wall Street," E. A. Krauss gives the following information on the problem:

"It is estimated that over twenty-five per cent of the industries participating in the war effort have no plant reconversion problem since their war contracts call for goods or services identical with, or similar to, those of peace-time. These comprise an important segment of our economy and include such industries as food products, clothing, meat packers, baking and milling, soft drinks, coal, drugs, leather, shoes, air transport, metal mining, dairy products, petroleum, paper, brewing and distilling, retail trade, railroads, soap, sugar, tobacco, and utilities. With most, engineering or technical problems are entirely absent; in some few cases they are quite minor.

"Altogether, it is estimated that about one-third of industry can return to peace-time production immediately or in shortest order. Some, however, may find their normal transportation or distribution facilities disorganized; while production can be resumed at once, the distribution end may require a period of readjustment. This applies especially where sales organizations must be recreated or where distribution facilities such as cars and trucks are inadequate.

"Little time for change-over, generally less than three months, will be required by many major industries. Thus reconversion will be rapid in the steel, textile, rubber tire, building, container, farm equipment, paint, household furnishings, electrical equipment, chemical and foundry industries.

"Four to six months will be required by the automotive, heavy machinery, machine tool, metal fabricating, railroad equipment industries and some carpet makers.

"More than six months will be needed by the office equipment industry, possibly a full year, while major problems will have to be faced by the aircraft manufacturing and shipbuilding industries with extended periods of readjustment likely. With the exception of the latter two, reconversion as a whole, technically speaking, should not be too difficult and only a small percentage of concerns may require outside financing to tide them over the readjustment period.

"The foregoing estimates are of course tentative and subject to change, depending on various conditions; also they may not apply to all companies alike within a given industry. Variations will occur in line with character and intensity of a company's war production activity. Other, non-technical matters are also to be considered.

"Even where no technical reconversion problem exists, difficulties of a collateral nature may arise having an equivalent effect. Take for instance the drug and pharmaceutical industry where technical problems are totally absent but the inventory situation is potentially dangerous. Such companies will have on hand, when the war is over, vast stocks of crude and prepared drugs, often acquired at high prices, in various stages of processing for the Armed Forces; the latter them-

(Continued on page 701)

ISOPROPYL AND ETHYL

Having turned to isopropyl alcohol as a substitute for ethyl alcohol, manufacturers are now having difficulty obtaining supplies of isopropyl alcohol. This article tells why this is so and gives some further information on the outlook for supplies of ethyl alcohol.

ISOPROPYL alcohol supplies have recently become definitely short and this industry is the principal sufferer. The reason for this is that extremely large quantities of isopropyl alcohol are being used for the production of acetone for war purposes. Acetone is being used in this country to absorb the greatly increased quantities of acetylene gas that is being demanded for welding of ships and other war necessities: Acetone is being used by other of the United Nations as a solvent for Cordite. Not only the belligerent nations who are our allies are receiving this product on Lend-Lease, but even Sweden is said to have been allocated solvents on Lend-Lease recently.

Production of isopropyl alcohol in this country is confined to three manufacturers, making respectively about 28,000,000; 20,000,000; and 18,000,000 gallons, or a total annual production of about 65,000,000 gallons. Of this production, about 42,000,000 gallons are used for the production of some 275,000,000 pounds of acetone, to make up, with acetone from other sources, an acetone production of some 370,000,000 pounds.

This leaves a balance of about 23,000,000 gallons of isopropyl alcohol for all other uses, with a demand existing for somewhere between 30,000,000 and 40,000,000 gallons. Rubbing alcohol demand is at an all time high of between 3,000,000 and 4,500,000 gallons. Cosmetic demand is extremely high due to the inability of cosmetic manufacturers to obtain more than fifty per cent of their ethyl requirements of 1941, and with an all time high demand for cosmetics facing them.

In looking over the allocations given on isopropyl alcohol of a recent month, the fact plainly stood out that all rubbing alcohol and cosmetic requests for supplies were cut to one-quarter of the amount requested. This was done despite the fact that requests for all other uses were granted in full. What the reason is for this is not definitely known, but it must be that those in charge of allocation of isopropyl alcohol either have no use for rubbing alcohol and cosmetics and consider them non-essential, or else they are going sharply to curtail the amount of isopropyl alcohol being used in preparations that formerly used ethyl alcohol.

In the face of this condition, the ethyl alcohol situation is not as yet balanced, although the figures being given out vary so much from time to time that it is difficult accurately to estimate just how short alcohol supplies for next year will be. Last month the shortage was estimated at some 50,000,000 gallons, and then about two weeks later this estimate was raised to 100,000,000 gallons. However, information released by WPB early this month indicates a shortage of only 5,000,000 gallons, which, if true, would mean that a balance has been reached for all practical purposes.

These latest figures state that alcohol requirements have been scaled downward from 640,000,000 gallons to 625,000,000 gallons, and production, based on maximum use of corn and molasses, is estimated at 620,000,000 gallons. This information was released by WPB following a meeting of WPB officials with the Distillers Industry Advisory Committee on Dec. 2.

Of the requirements of 625,000,000 gallons for 1944, synthetic rubber will consume approximately 250,000,000 gallons, which is a reduction from previous estimates of 330,000,000 gallons. And although estimates of total requirements for next year were reduced by only 15,000,000 gallons, and synthetic rubber requirements by 80,000,000 gallons, it was now stated where the other 65,000,000 gallons released from the synthetic rubber program are to be consumed.

The stockpile as of December 1 had declined to an estimated 75,000,000 gallons due to accelerated foreign shipments which should taper off during the first half of 1944. Of the total production for 1944, beverage distillers will produce 240,000,000 gallons, industrial alcohol distillers will produce 225,000,000 gallons, and synthetic producers will turn out 75,000,000 gallons. Some sources place this synthetic alcohol estimate too high and say that it should not be higher than 60,000,000 gallons. New plant facilities which will come into production during 1944 are expected to produce about 80,000,000 gallons. These are the latest figures, but they are subject to change at any moment as we have seen in recent weeks.

And while there has been much talk of the production of alcohol from waste sulfite liquors from the paper mills, this program seems to be lacking support from many directions, one of which is from at least one large paper

(*Continued on page 700*)

PREVENTION OF INDUSTRIAL DERMATITIS

By M. A. LESSER

"The incidence of occupational dermatitis in our country has never been so great as at the present time, and the need for adequate prevention and control has never been more important. New industries, particularly those concerned with the war effort, have contributed many causative agents to industrial dermatitis. In old industries, where dermatitis was commonly observed, the step-up in industrial activities and the enrolment of new employees have resulted in a definite increase in dermatitis, particularly among men and women above and below the usual employment ages."

With this statement, the Committee on Industrial Dermatoses of the A.M.A.[1] aptly summarized and fully recognized what undoubtedly constitutes the most pressing problem of modern industrial health. Back in 1938, Schwartz[2] of the U. S. Public Health Service observed that skin diseases resulting from occupation were increasing, while other occupational diseases were decreasing. More recent reports have served to confirm this trend, not only in this country,[3, 4, 5] but in Great Britain as well[6].

A little over two years ago, Orecklin[7] estimated that about 250,000 cases of occupational dermatoses occurred in the United States during the period of one year. This figure included only those instances in which there was time lost from work, but not those in which the workers stayed on their jobs despite their skin involvement. Newer studies indicate that this was probably a quite conservative figure. Ordinarily, the normal frequency of occupational skin diseases compared to all other skin diseases is about two to one. However, Schwartz[8] has reported this ratio to be much higher in present war industries. He found industrial plants in which there were 100 or more cases of industrial dermatitis but not one instance of other occupational disease.

Although present conditions have caused a change in the general picture, pre-war studies[9] showed that occupational dermatoses were most prevalent in the following industries, in the order given: Synthetic resin manufacture, chemicals and dyes manufacture, tanneries, oil refining, candy manufacture, fabric dyeing, rayon manufacture, steel manufacture, fur dyeing, rubber manufacture, glass manufacture, and, automobile manufacture.

It is well recognized that the number of substances that may act as skin irritants in industry is manifold and numerous. Moreover, as new products are developed and used, instances of sensitiveness to these newer materials begin to appear in the medical literature. Nonetheless, the most frequent causative agents fall into well established categories as follows: Petroleum oils and greases, alkalis (including cement and concrete), solvents, chromic acid and chromic salts, metals and metal plating, dyes, plants, rubber and its compounds, paints and varnishes, and, synthetic resins.[9] Cutting oils and related compounds have been found to be especially guilty and such materials are the most frequent causes of dermatitis among machinists and metal workers.[10, 11]

In a symposium on the subject last year, Schwartz[8] remarked that despite the fact that there is more time lost from work on account of occupational dermatitis than from any other occupational disease, not as much attention has been given to the prevention of occupational dermatitis as to the prevention of occupational poisoning. He warned that if a toxic substance is present in sufficient quantities to irritate the skin, it may also affect the entire system. Thus protecting the skin may save the whole body.

In addition to mechanical measures common to most safety installations (e.g. reduction of toxic substances in air by means of enclosed processes and exhaust systems), there are four basic measures for controlling industrial dermatoses. These are: proper selection of workers, cleanliness, protective clothes and skin protecting compositions.

Proper selection of workers is based upon a thorough physical examination; taking into account the industrial hazards the potential worker may face and his ability to combat them. Where skin-sensitizing or dermal irritants cannot be avoided, such examinations are of prime importance in the selection of a suitable personnel. Patch testing has often been advocated as a means of determining sensitivity to industrial chemicals.[7, 12] However, it has been pointed out that preemployment patch testing for the purpose of discover-

During the present emergency, industrial dermatitis is a most important problem, control of which is great aid to furtherance of the war effort. This article is complete in giving the latest information on this subject.

ing those workers who are allergic is not advisable since such individuals are usually not sensitive to chemicals with which they have had no previous contact. Indeed, such patch testing with sensitizing materials may be the means of sensitizing the workers.[8]

"Lack of cleanliness," wrote Schwartz[2] some years ago, "is the most important predisposing cause of occupational dermatitis." Since that time, he[8] and others[1, 7, 13] have continued to stress not only the essential role of personal hygiene but of environmental cleanliness as well. It is now realized that a clean environment, including walls and floors of workrooms, clean machines, and air kept free from irritating fumes, vapors, and dusts, will greatly diminish the susceptibility of workers to industrial dermatitis.[9]

The factor of personal cleanliness immediately brings to the fore the role played by cleansing agents in the incidence of occupational skin diseases. Cleansing agents, such as strongly alkaline soaps, oils and oil solvents are recognized as important factors in the causation of these disorders.[14] Many authorities[8, 15] have condemned the tendency of workers to use the most available and most rapid-acting solvent to clean the skin. Such cleansing agents as turpentine, alcohol, naphtha acetone, gasoline, calcium hypochlorite, various acids and alkalis, are either primary cutaneous irritants, sensitizing agents or defatting substances. Their use should be avoided.

Soap itself has been accused of being a causative factor in industrial dermatoses. This is true where sensitivity to soap exists, but in the majority of cases the dermatitis can be traced to excessive alkali, harsh abrasives or chemicals present in the soap. In their extensive study of the subject, Klauder, Gross and Brown[15] came to the conclusion that "Excluding all soap in powder form that contains alkaline salts, the role of soap used for toilet purposes as an eczematogenous substance has doubtless been exaggerated, in view of its universal and frequent use, the dilute solution of soap and its ingredients."

In selecting a cleanser for the personal use of workers, certain factors should be kept in mind. According to Schwartz,[8] an industrial cleanser for the normal skin should have the following characteristics: It should (a) be freely soluble in hard, soft, cold or hot water; (b) remove foreign soil, fats and oils without harming the skin; (c) not contain harsh abrasives or irritant scrubbers; (d) be handy to use in cake form, or should flow easily through soap dispensers if in powder or liquid form, and, (e) not deteriorate or become insect-infected.

In this connection it is well to remember that the Committee on Industrial Dermatitis[1] states that the best cleanser is a mild toilet soap and plenty of warm water. Schwartz[16] recommends the use of the following industrial skin cleanser for general purposes:

Neutral toilet soap	30
Colloidal clay (Bentonite or Kieselguhr)	30
Synthetic detergent (Santomerse, Nacconol, Igepon or Duponol)	10
Hydrous wool fat	5
Perfume	1

However, where sensitivity to soap exists, or where an eczematous or other dermatological condition exists, soaps are generally contraindicated and other cleansing materials must be used. During recent years, sulfonated oils have been recommended as detergents for diseases of the skin[17, 18] and industrial dermatologists have adapted these compositions as substitutes for soaps. Thus Klauder and his associates[15] developed several formulas for this purpose. Of these, the following (Formula 12) is preferred to the others because it is not only a satisfactory detergent but also because it exerts more of an emollient action:

Sulfonated neat's foot oil	45 per cent
Light liquid petrolatum	45 " "
Gelatin, 25% aqueous solution	10 " "

Heat the oil mixtures on a water bath until clear; then add the gelatin and stir until solution is effected.

If a lathering effect is desired, this action can be attained by mixing two parts of Formula 12 with one part of a 20 per cent solution of sodium lauryl sulfate. As a substitute for the popular mechanic abrasive soaps, these workers suggest that white granulated corn meal be combined with Formula 12 in the proportion of 1½ parts, by weight, of corn meal and 1 part,

(*Continued on page 701*)

THE INDUSTRY AND ITS CRITICS

Perhaps the outstanding difficulty that this industry has to face is the criticism of the products of the industry by all manner of people who, most of the time, are not fully informed on the subjects to which they address themselves. Thus writers on health will warn against the use of particular types of products of this industry, many times quoting physicians who were very little informed more than the one who is quoting them. In the field of therapy one would think that the doctors would realize how often it is that a particular treatment discarded at a particular time for some new advanced method, has been welcomed back by the physicians as the proper treatment after all.

Unfortunately for this industry, types of products develop into fads on the part of the public and everyone thinks at about the same time that all their ills and pains will disappear if they take the particular type of product that is in vogue at that time. We all know well of the tonics of the past—some of which improved the patient's feeling of well-being by means of a rather high alcohol content. These products were later discarded due to the fact that they were damned on every hand even though the alcohol might have had some beneficial effect through some action such as lowering the blood pressure which the Rockefeller Institute later proved it did despite the fact that all doctors and almost every one else stated that alcohol raised the blood pressure.

Laxatives are a case in point. The talk of removing waste from the colon has much to recommend it and the type of laxative which people use during a certain period of time often constitutes a fad. Thus within our memory we had the Bulgarian bacilli fad, the mineral oil fad, the phenolphthalein fad, the mineral oil-agar-phenolphthalein fad, the psyllium seed fad, and others. Now most of these products have found their proper places, most of them being used to a large extent today.

The unfortunate part of all of these discoveries is that the public at large seeks out anything new in medicine in the hope that it is the one thing that they have all needed to keep them feeling on the top of the world at all times. Thus they have rushed to different types of alkalizers because they came to the belief that their upsets, headaches, and other uncomfortable experiences were due to an acid condition. Any new product placed on the market that obtains a foothold is bound to experience a real growth in consumption as "one man tells another." The product must be an efficacious product or it will never obtain a foothold. After it has experienced its rise in sales, it will settle down to a normal level for a long period after until newer products arise to displace it to a large extent.

Vitamins are now the outstanding fad and this industry is being blamed by many physicians and by many others in the country for promoting the consumption of these products to the extent to which they have promoted them. We fully agree that many more vitamin pills and tablets are used than are necessary. The public is vitamin-conscious to say the least, and almost every other person is taking some form of vitamin products and they just know that these products make them feel better.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, and mouthpiece for organized medicine in this country has been doing some talking on the "Use and Abuse of Vitamins," referring to these products as the "substitutes for the tonics and potions of the past." It must be recalled at this time that vitamins have been up scientifically through use by members of the medical profession and the large vitamin producers have been, and still are the large ethical houses of the country who work closely with the Council on Pharmacy and Chemistry of the American Medical Association and who build up the sale for their products solely by the detailing of physicians.

Therefore, it is the doctors of this country who are responsible for the large public demand for vitamin products. We do not mean to deny that vitamins were not exploited by houses in the proprietary medicines by advertising direct to the public, but these products advertised to the public differ from those of the ethical houses only as to the matter of potencies of some of the

This industry and its products are constantly under attack by self-appointed critics. Now the criticism is being directed mainly at the large sale of vitamin products, although other drug products as well as cosmetics are not escaping these attacks.

ingredients and in the matter of price. Of course the physicians will say that vitamins should not be taken indiscriminately but should be prescribed by a physician. Unfortunately for the medical profession, however, the products have in no way been proven harmful, and apparently there is no reason why the public should not consume them if they so desire. Undoubtedly a very large majority of the people who take these products are benefited by them so there is good reason for their manufacture and sale.

But the peculiar part of the criticism of the products of this industry is that almost anyone will venture forth even though he is just about completely unqualified. And the public is just about as gullible about taking these criticisms to heart as it used to be about believing some of the exaggerated claims that were made for some products of this industry before the Government took over control of label statements and advertising claims. The public goes strongly for anything that tells them how to keep their health, just as they go strongly for any new product that they believe will keep them feeling top-notch.

The same set of conditions obtains in cosmetics as in drugs and medicines. All manner of people criticize cosmetics whether or not their criticisms are well founded. Even the medical profession—particularly the dermatologists—desire to have the last word on what type of cosmetics should and should not be used. The American Medical Association has allowed certain cosmetic manufacturers to advertise their product in the Journal of the American Medical Association and thus these products have the blessing of organized medicine. These manufacturers who are thus honored hope that the physicians who receive and read the Journal will be impressed by this advertising and will mention the names of these manufacturers to their female patients as well as to their own families.

But it is peculiar how often it happens that when any cosmetic is built around a scientific discovery that has to do with the health of the skin, the medical profession —which more often than not is not identified very closely with the product—will go to town to disprove the product before it is well established. And the fear that department stores and other sellers of cosmetics have of a new cosmetic proving dangerous, makes this criticism by the physicians a very lethal weapon. Only recently we saw a promising new cosmetic that was starting to get real repeat orders in certain parts of the country, kicked out of some of the leading department stores because of a one-sided criticism written by a man who himself could not possibly be acquainted with the true facts. The manufacturer was then called upon to put on a scientific demonstration in a prominent hospital for the officials of these department stores.

How the industry is to defend itself against these tactics is something that we do not assume to be able to answer. All that we can say is that the manufacturers in the industry should be most careful in their claims and not let the advertising department attempt to oversell their products. Conservatism in this regard must be the watchword of both manufacturers of both drugs and cosmetics if manufacturers want to keep this criticism from being aimed directly at them. Furthermore, exaggeration in the exploitation of products gives these self-appointed critics that want some popular subject to talk or write about the opportunity to point to specific manufacturers and their products as horrible examples, and this does not do the manufacturers or the industry as a whole any good. For if the products of this industry are efficacious, and do accomplish the results claimed for them without exerting any harmful influence, then the critics will be proven wrong and the public will no longer have any faith in them. The industry should not hesitate to make the claims which the manufacturers know are justified and which the manufacturers can prove. There should be no lessening of trying to sell more of the products of the industry if the manufacturers continue to offer products which will improve the health and well-being of the people at large.

POST-WAR RECONVERSION

Every business man is wondering what conditions will be like when the war is over. One of the determining factors is the extent of reconversion to the production of peace-time goods, and the length of time this reconversion will take.

IN THE midst of the stress of trying to produce all that is possible during the abnormal conditions of war time, business men are naturally wondering what conditions will be like when the war is over and this enormous demand for war goods is at an end. As part of the post-war picture, the question of reconversion is of prime importance. How many of the present plants will be reconverted to the production of peace-time products, and how long will this reconversion take?

A partial answer to the question is provided by a survey recently made by the National Industrial Conference Board. This survey shows that four out of every ten firms questioned are planning one hundred per cent reconversion of plants and productive facilities. About forty-five per cent of the non-durable goods firms answering the questionnaire, and about thirty-nine per cent of the durable goods firms contemplate complete reconversion of war facilities, with steel, electrical equipment, petroleum, shoes and leather, and textile companies prominent in these categories. Reconversion of more than half of their plants and facilities is contemplated by fifteen per cent of the companies surveyed. Outstanding in this group are firms in the automotive, machine tool, and office equipment industries. About six per cent of the reporting companies, including concerns in the chemical and metal products industries, intend to reconvert less than half of their war-time facilities.

Writing in the "Magazine of Wall Street," E. A. Krauss gives the following information on the problem:

"It is estimated that over twenty-five per cent of the industries participating in the war effort have no plant reconversion problem since their war contracts call for goods or services identical with, or similar to, those of peace-time. These comprise an important segment of our economy and include such industries as food products, clothing, meat packers, baking and milling, soft drinks, coal, drugs, leather, shoes, air transport, metal mining, dairy products, petroleum, paper, brewing and distilling, retail trade, railroads, soap, sugar, tobacco, and utilities. With most, engineering or technical problems are entirely absent; in some few cases they are quite minor.

"Altogether, it is estimated that about one-third of industry can return to peace-time production immediately or in shortest order. Some, however, may find their normal transportation or distribution facilities disorganized; while production can be resumed at once, the distribution end may require a period of readjustment. This applies especially where sales organizations must be recreated or where distribution facilities such as cars and trucks are inadequate.

"Little time for change-over, generally less than three months, will be required by many major industries. Thus reconversion will be rapid in the steel, textile, rubber tire, building, container, farm equipment, paint, household furnishings, electrical equipment, chemical and foundry industries.

"Four to six months will be required by the automotive, heavy machinery, machine tool, metal fabricating, railroad equipment industries and some carpet makers.

"More than six months will be needed by the office equipment industry, possibly a full year, while major problems will have to be faced by the aircraft manufacturing and shipbuilding industries with extended periods of readjustment likely. With the exception of the latter two, reconversion as a whole, technically speaking, should not be too difficult and only a small percentage of concerns may require outside financing to tide them over the readjustment period.

"The foregoing estimates are of course tentative and subject to change, depending on various conditions; also they may not apply to all companies alike within a given industry. Variations will occur in line with character and intensity of a company's war production activity. Other, non-technical matters are also to be considered.

"Even where no technical reconversion problem exists, difficulties of a collateral nature may arise having an equivalent effect. Take for instance the drug and pharmaceutical industry where technical problems are totally absent but the inventory situation is potentially dangerous. Such companies will have on hand, when the war is over, vast stocks of crude and prepared drugs, often acquired at high prices, in various stages of processing for the Armed Forces; the latter them-

(*Continued on page 701*)

ISOPROPYL AND ETHYL

Having turned to isopropyl alcohol as a substitute for ethyl alcohol, manufacturers are now having difficulty obtaining supplies of isopropyl alcohol. This article tells why this is so and gives some further information on the outlook for supplies of ethyl alcohol.

ISOPROPYL alcohol supplies have recently become definitely short and this industry is the principal sufferer. The reason for this is that extremely large quantities of isopropyl alcohol are being used for the production of acetone for war purposes. Acetone is being used in this country to absorb the greatly increased quantities of acetylene gas that is being demanded for welding of ships and other war necessities: Acetone is being used by other of the United Nations as a solvent for Cordite. Not only the belligerent nations who are our allies are receiving this product on Lend-Lease, but even Sweden is said to have been allocated solvents on Lend-Lease recently.

Production of isopropyl alcohol in this country is confined to three manufacturers, making respectively about 28,000,000; 20,000,000; and 18,000,000 gallons, or a total annual production of about 65,000,000 gallons. Of this production, about 42,000,000 gallons are used for the production of some 275,000,000 pounds of acetone, to make up, with acetone from other sources, an acetone production of some 370,000,000 pounds.

This leaves a balance of about 23,000,000 gallons of isopropyl alcohol for all other uses, with a demand existing for somewhere between 30,000,000 and 40,000,000 gallons. Rubbing alcohol demand is at an all time high of between 3,000,000 and 4,500,000 gallons. Cosmetic demand is extremely high due to the inability of cosmetic manufacturers to obtain more than fifty per cent of their ethyl requirements of 1941, and with an all time high demand for cosmetics facing them.

In looking over the allocations given on isopropyl alcohol of a recent month, the fact plainly stood out that all rubbing alcohol and cosmetic requests for supplies were cut to one-quarter of the amount requested. This was done despite the fact that requests for all other uses were granted in full. What the reason is for this is not definitely known, but it must be that those in charge of allocation of isopropyl alcohol either have no use for rubbing alcohol and cosmetics and consider them non-essential, or else they are going sharply to curtail the amount of isopropyl alcohol being used in preparations that formerly used ethyl alcohol.

In the face of this condition, the ethyl alcohol situation is not as yet balanced, although the figures being given out vary so much from time to time that it is difficult accurately to estimate just how short alcohol supplies for next year will be. Last month the shortage was estimated at some 50,000,000 gallons, and then about two weeks later this estimate was raised to 100,000,000 gallons. However, information released by WPB early this month indicates a shortage of only 5,000,000 gallons, which, if true, would mean that a balance has been reached for all practical purposes.

These latest figures state that alcohol requirements have been scaled downward from 640,000,000 gallons to 625,000,000 gallons, and production, based on maximum use of corn and molasses, is estimated at 620,000,000 gallons. This information was released by WPB following a meeting of WPB officials with the Distillers Industry Advisory Committee on Dec. 2.

Of the requirements of 625,000,000 gallons for 1944, synthetic rubber will consume approximately 250,000,000 gallons, which is a reduction from previous estimates of 330,000,000 gallons. And although estimates of total requirements for next year were reduced by only 15,000,000 gallons, and synthetic rubber requirements by 80,000,000 gallons, it was now stated where the other 65,000,000 gallons released from the synthetic rubber program are to be consumed.

The stockpile as of December 1 had declined to an estimated 75,000,000 gallons due to accelerated foreign shipments which should taper off during the first half of 1944. Of the total production for 1944, beverage distillers will produce 240,000,000 gallons, industrial alcohol distillers will produce 225,000,000 gallons, and synthetic producers will turn out 75,000,000 gallons. Some sources place this synthetic alcohol estimate too high and say that it should not be higher than 60,000,000 gallons. New plant facilities which will come into production during 1944 are expected to produce about 80,000,000 gallons. These are the latest figures, but they are subject to change at any moment as we have seen in recent weeks.

And while there has been much talk of the production of alcohol from waste sulfite liquors from the paper mills, this program seems to be lacking support from many directions, one of which is from at least one large paper

(Continued on page 700)

PREVENTION OF INDUSTRIAL DERMATITIS

By M. A. LESSER

"The incidence of occupational dermatitis in our country has never been so great as at the present time, and the need for adequate prevention and control has never been more important. New industries, particularly those concerned with the war effort, have contributed many causative agents to industrial dermatitis. In old industries, where dermatitis was commonly observed, the step-up in industrial activities and the enrolment of new employees have resulted in a definite increase in dermatitis, particularly among men and women above and below the usual employment ages."

With this statement, the Committee on Industrial Dermatoses of the A.M.A.[1] aptly summarized and fully recognized what undoubtedly constitutes the most pressing problem of modern industrial health. Back in 1938, Schwartz[2] of the U. S. Public Health Service observed that skin diseases resulting from occupation were increasing, while other occupational diseases were decreasing. More recent reports have served to confirm this trend, not only in this country,[3, 4, 5] but in Great Britain as well[6].

A little over two years ago, Orecklin[7] estimated that about 250,000 cases of occupational dermatoses occurred in the United States during the period of one year. This figure included only those instances in which there was time lost from work, but not those in which the workers stayed on their jobs despite their skin involvement. Newer studies indicate that this was probably a quite conservative figure. Ordinarily, the normal frequency of occupational skin diseases compared to all other skin diseases is about two to one. However, Schwartz[8] has reported this ratio to be much higher in present war industries. He found industrial plants in which there were 100 or more cases of industrial dermatitis but not one instance of other occupational disease.

Although present conditions have caused a change in the general picture, pre-war studies[9] showed that occupational dermatoses were most prevalent in the following industries, in the order given: Synthetic resin manufacture, chemicals and dyes manufacture, tanneries, oil refining, candy manufacture, fabric dyeing, rayon manufacture, steel manufacture, fur dyeing, rubber manufacture, glass manufacture, and, automobile manufacture.

It is well recognized that the number of substances that may act as skin irritants in industry is manifold and numerous. Moreover, as new products are developed and used, instances of sensitiveness to these newer materials begin to appear in the medical literature. Nonetheless, the most frequent causative agents fall into well established categories as follows: Petroleum oils and greases, alkalis (including cement and concrete), solvents, chromic acid and chromic salts, metals and metal plating, dyes, plants, rubber and its compounds, paints and varnishes, and, synthetic resins.[9] Cutting oils and related compounds have been found to be especially guilty and such materials are the most frequent causes of dermatitis among machinists and metal workers.[10, 11]

In a symposium on the subject last year, Schwartz[8] remarked that despite the fact that there is more time lost from work on account of occupational dermatitis than from any other occupational disease, not as much attention has been given to the prevention of occupational dermatitis as to the prevention of occupational poisoning. He warned that if a toxic substance is present in sufficient quantities to irritate the skin, it may also affect the entire system. Thus protecting the skin may save the whole body.

In addition to mechanical measures common to most safety installations (e.g. reduction of toxic substances in air by means of enclosed processes and exhaust systems), there are four basic measures for controlling industrial dermatoses. These are: proper selection of workers, cleanliness, protective clothes and skin protecting compositions.

Proper selection of workers is based upon a thorough physical examination; taking into account the industrial hazards the potential worker may face and his ability to combat them. Where skin-sensitizing or dermal irritants cannot be avoided, such examinations are of prime importance in the selection of a suitable personnel. Patch testing has often been advocated as a means of determining sensitivity to industrial chemicals.[7, 12] However, it has been pointed out that pre-employment patch testing for the purpose of discover-

During the present emergency, industrial dermatitis is a most important problem, control of which is great aid to furtherance of the war effort. This article is complete in giving the latest information on this subject.

ing those workers who are allergic is not advisable since such individuals are usually not sensitive to chemicals with which they have had no previous contact. Indeed, such patch testing with sensitizing materials may be the means of sensitizing the workers.[8]

"Lack of cleanliness," wrote Schwartz[2] some years ago, "is the most important predisposing cause of occupational dermatitis." Since that time, he[8] and others[1, 7, 13] have continued to stress not only the essential role of personal hygiene but of environmental cleanliness as well. It is now realized that a clean environment, including walls and floors of workrooms, clean machines, and air kept free from irritating fumes, vapors, and dusts, will greatly diminish the susceptibility of workers to industrial dermatitis.[9]

The factor of personal cleanliness immediately brings to the fore the role played by cleansing agents in the incidence of occupational skin diseases. Cleansing agents, such as strongly alkaline soaps, oils and oil solvents are recognized as important factors in the causation of these disorders.[14] Many authorities[8, 15] have condemned the tendency of workers to use the most available and most rapid-acting solvent to clean the skin. Such cleansing agents as turpentine, alcohol, naphtha acetone, gasoline, calcium hypochlorite, various acids and alkalis, are either primary cutaneous irritants, sensitizing agents or defatting substances. Their use should be avoided.

Soap itself has been accused of being a causative factor in industrial dermatoses. This is true where sensitivity to soap exists, but in the majority of cases the dermatitis can be traced to excessive alkali, harsh abrasives or chemicals present in the soap. In their extensive study of the subject, Klauder, Gross and Brown[15] came to the conclusion that "Excluding all soap in powder form that contains alkaline salts, the role of soap used for toilet purposes as an eczematogenous substance has doubtless been exaggerated, in view of its universal and frequent use, the dilute solution of soap and its ingredients."

In selecting a cleanser for the personal use of workers, certain factors should be kept in mind. According to Schwartz,[8] an industrial cleanser for the normal skin should have the following characteristics: It should (a) be freely soluble in hard, soft, cold or hot water; (b) remove foreign soil, fats and oils without harming the skin; (c) not contain harsh abrasives or irritant scrubbers; (d) be handy to use in cake form, or should flow easily through soap dispensers if in powder or liquid form, and, (e) not deteriorate or become insect-infected.

In this connection it is well to remember that the Committee on Industrial Dermatitis[1] states that the best cleanser is a mild toilet soap and plenty of warm water. Schwartz[16] recommends the use of the following industrial skin cleanser for general purposes:

Neutral toilet soap	30
Colloidal clay (Bentonite or Kieselguhr)	30
Synthetic detergent (Santomerse, Nacconol, Igepon or Duponol)	10
Hydrous wool fat	5
Perfume	1

However, where sensitivity to soap exists, or where an eczematous or other dermatological condition exists, soaps are generally contraindicated and other cleansing materials must be used. During recent years, sulfonated oils have been recommended as detergents for diseases of the skin[17, 18] and industrial dermatologists have adapted these compositions as substitutes for soaps. Thus Klauder and his associates[15] developed several formulas for this purpose. Of these, the following (Formula 12) is preferred to the others because it is not only a satisfactory detergent but also because it exerts more of an emollient action:

Sulfonated neat's foot oil	45 per cent
Light liquid petrolatum	45 " "
Gelatin, 25% aqueous solution	10 " "

Heat the oil mixtures on a water bath until clear; then add the gelatin and stir until solution is effected.

If a lathering effect is desired, this action can be attained by mixing two parts of Formula 12 with one part of a 20 per cent solution of sodium lauryl sulfate. As a substitute for the popular mechanic abrasive soaps, these workers suggest that white granulated corn meal be combined with Formula 12 in the proportion of 1½ parts, by weight, of corn meal and 1 part,

(*Continued on page 701*)

THE DRAWBACK

By FORREST K. GREEN*

DIABOLICALLY fashioned from that most plentiful of American textiles, Red Tape, the Alcohol Tax Drawback is a real "bug-a-boo" to the smaller drug manufacturer.

Large firms with adequate accounting and statistical staffs, found this just another bit of routine to be handled with the other multiplicity of records, charts, and reports.

But the small manufacturer, already bewildered by priorities and allocations, found the drawback, indeed, aptly named, and the job was usually the unwanted child of the organization to be buck-passed between the bookkeeper and the plant superintendent. When it stopped bouncing, it usually landed on the poor unsuspecting gink who kept the specially denatured alcohol records.

This onerous task in addition to the added burden of priority records and the increased complexity of other reports, led some smaller firms to abandon all claim to this opportunity of refund.

In other instances the chaotic and sketchy records were so incomplete that field inspectors were unable to check the validity of the claims.

A Simple System

A simple system furnishing all the required information in a form quickly available for checking, was devised to meet the needs of those smaller firms having no established method for assembling this data.

This is of particular value in that type of business in which most of the products are non-alcoholic, with the problem of segregating those sales of products eligible for drawback.

Two types of records are kept, a manufacturing record and a sales record.

The Manufacturing Record

This should present no difficulties as some such record was required in the past. A simple form (as shown in Figure 1) consists of eight columns, date, quantity of product manufactured, name of product, formula number of product, per cent of alcohol, quantity of alcohol used, balance of alcohol on hand, and the final column for receipts of alcohol.

MANUFACTURING
ALCOHOL RECORD

Date	Amount Finished	Name of Preparation Mfd.	% Alc.	Rx. No.	Amount Used	Balance	Recd.
		Amount Brought Forward					

FIGURE 1

When alcohol is received, the date of arrival, serial number of container and stamp, as well as date of stamp, are entered.

Thus this record also serves as a perpetual alcohol inventory.

The Sales Record

The sales or product disposal record of those items eligible for drawback are segregated by the following method.

All invoices regardless of whether for alcoholic products or not, are assembled in the conventional binder as soon as posted and numbered consecutively.

As a means of reference to those invoices covering alcoholic products, sets of forms were prepared which

*The William A. Webster Co., Memphis.

SALES RECORD
(NAME OF PRODUCT)

DATE	INVOICE NO.	(doz.) 6 OZ.	(doz.) 16 OZ.	(doz.) 32 OZ.

FIGURE 2

may be loose leaf or permanently bound into books. A separate book is used for each eligible product sold. (See Figure 2)

These forms consist of columns showing:

1. Date of invoice.
2. Number of invoice. (This is the essence of the system, furnishing a "fingertip" reference to the original invoice, thus obviating the unnecessary repetition of the name and address of the purchaser and other pertinent information.
3. A separate column for each size in which the product is marketed.

A clerk posts from the numbered invoices the alcoholic products in the book or form for that particular product. This may be done daily or weekly and requires but a few minutes.

The products may be entered as units, dozens, or gross as convenience indicates.

If wholesale quantities are sold, all entries should be made in dozens and the column so headed. This avoids use of figures too large.

Thus a sale of two gross, four ounce size would be entered as twenty-four in the four ounce column, and six only, eight ounce size would be entered as one-half in the eight ounce column.

When columns are totaled at the end of the quarter, the sums will represent the total sales in dozens of the various sizes, and this simplifies the computation into gallons. Thus, one dozen, eight ounce size equals six pints or .75 gallons, hence the number of dozens multiplied by .75 will compute directly into gallons.

Sufficient room is left on the forms between quarters to show the computations into gallons, also the multiplication by the per cent of alcohol and the conversion of this figure into proof gallons by multiplication by 1.9.

Thus all the original calculations on which the claim is based are preserved on the sales record for each product, and in event of variance from the alcohol tax auditors findings can readily be checked.

Preparation of Claim

A convenience in preparing the claim is a digest in tabular form consisting of totals for each product of all manufacturers and sales, as well as inventories on hand at the beginning and end of quarter.

MENTHOL EXCITEMENT

The excitement in menthol continues with many sellers of the products flying down to Brazil in an attempt to obtain supplies. However, the situation in Brazil remains about the same as it did before. The producers in Brazil are said to be Japanese with all the trickery of the Japanese in Japan. Therefore, one importer from this country goes to Brazil and buys a lot of menthol for shipment, only to be followed by another importer from this country who unwittingly buys the same lot of menthol at a higher price. The American importers who do the buying believe that the commitments are firm only to find out later that they were wrong.

One importer of menthol of long standing in this country wants to know what all the shooting is about. He says that this country does not consume over 500,000 pounds of menthol a year and that there are only ten large buyers who are important to importers. When menthol imports were in the hands of a few, the item was interesting to him. Now many more people have come into the picture and the item ceases to be interesting from an importing standpoint.

One manufacturer of synthetic menthol from Java citronella oil has been down to Brazil in an attempt to obtain some of the Brazilian menthol. He explains that since he can not obtain any more Java citronella oil at the present time for the production of synthetic menthol, he is trying to buy Brazilian menthol so as to supply this material to his customers and thus protect his position in the menthol business until the time when he can again get Java citronella oil and again produce synthetic menthol.

Prices quoted for Brazilian for arrival are, in some instances at least, above $20.00 per pound, indicating that the Japanese in Brazil are going to get all the traffic will bear, and also indicating that the item has pretty much lost any speculative possibilities, so far as importers are concerned. At these prices the goods must be moved directly to the consumers and not held for any length of time by importers. For it is an old Japanese custom to drop the price after importers in this country have been loaded with goods at high prices.

DRUG SUPPLIES AFTER TWO YEARS OF WAR

By DR. E. C. MERRILL*

JUST two years have elapsed since Pearl Harbor and our entry into the war. During this hectic period we have seen radical changes in many fields of manufacturing. The field of medicinal drugs and pharmaceutical products has proved no exception to the influence of wartime demands.

During the earlier stages of the war period, we were faced with a rapidly accelerating number of shortages of crude materials used in medicinal products, many of which were due to increased demand and curtailment of importations. Today while numerous medicinal drugs are short in supply, there exists nevertheless a greater problem, generally speaking, in the availablilty of materials employed in the production of containers, closures, cartons, and packaging materials.

Nevertheless, the effect of shortages of crude drugs over the period of two years has of necessity been reflected in the formulation of numerous medicinal and pharmaceutical preparations. Coincidentally, it has spurred the enterprise of certain dealers in botanical drugs to the successful domestic production of belladonna, stramonium, hyoscyamus, digitalis, etc., thereby relieving a most critical situation of supply.

Curiously enough the broadly sweeping shortages affecting the industry have not been items of especial therapeutic merit but rather in the nature of vehicles and solvents such as we see in alcohol, glycerin, and sugar.

Suffice it to say, however, that numerous steps by the members of the industry to conserve these important materials have resulted in substantial reductions in many instances, not alone in the proprietary field but as well in numerous pharmaceuticals and official products. Worthy of special mention may be cited numerous permissive changes in the formulation of elixirs and syrups in the National Formulary; also in the U. S. Pharmacopoeia certain reduction in Glycerin content in a number of tinctures including Tincture of Opium.

Propylene Glycol holds promise for more extended use as serving in part at least to conserve both Glycerin and Alcohol, and its standard for purity and quality is now under consideration by the National Formulary Committee. A proposal to utilize Propylene Glycol in whole or in part for numerous products containing Glycerin may eventuate, since its acceptance by the Food and Drug Administration has been sanctioned.

ISOPROPANOL

Although available under allocation at this time in rather uncertain quantities, it is finding a new place as a solvent and vehicle in numerous products of an external nature. Its position relative to alcohol is most advantageous.

Of the more important allocated materials are: Phenol and its derivatives, Citrates, Bismuth and its Salts, Light Magnesium Oxide, and Pyrethrum, Pine Oil, Cresols and Oil of Peppermint, showing greater tightness at this time while numerous crude materials that were formerly regarded as tight have shown definite easing in availablility.

PHENOL AND ITS DERIVATIVES

Because of the increased demand for Benzol for war needs, Phenol and its derivatives are accordingly affected in the shortage of the parent material.

This effect definitely is noted in the availability of the Salicylates, Benzoate, and numerous dependent derivative products, and so we have allocations on Acetyl Salicylic Acid, Cresols, etc.

LIGHT MAGNESIUM OXIDE

Because of the rubber-production program, restrictive orders on the use of Light Magnesium Oxide have

*Chief Chemist, United Drug Co., Boston. Paper delivered before Mid-Year Meeting, Technical Section, Proprietary Association of America, December 8.

Once again Dr. Merrill brings us up to date on the changes that the war has brought and is likely to bring about in medicinals.

DR. E. C. MERRILL

temporarily at least interdicted their use in medicinal products, even to a point of suspending production of Milk of Magnesia by the hydrated oxide method.

Similarly has the demand for the Armed Forces eliminated Pyrethrum, Pine Oil, and Cresol from immediate consideration in medicinal preparations.

QUININE, CINCHONA, AND ITS DERIVATIVES

The general restrictions on usage of Quinine, Cinchona, and its derivatives and necessity for conservation of this important material has resulted in the adoption of Totaquine in the First Supplement to the United States Pharmacopoeia. Likewise included are capsule and tablets of Totaquine.

Similarly has the restrictive order created the elimination of Quinine and its associated alkaloids from various medicinals and even both the National Formulary and Pharmacopoeial preparations containing same, where these products are not employed as anti-malarial agents. And so in this particular field we have seen numerous changes in formulation of such products with the inevitable qualifying changes in both nomenclature and labeled directions and usage.

Simultaneously has grown and developed to tremendous volume of production, Atabrine as a close ally of Quinine in its fight against malaria and the expected increased demand created by return of our Armed Forces in the Post-War Period.

LACTOSE OR MILK SUGAR

Another item of considerable concern at this time as affecting formulation and production of medicinal preparations, infant foods, etc., is the shortness of supply in Milk Sugar, reflected by the heavy military demand on dairy products of all kinds and especially milk powder. More recently has this demand been accentuated by the rapid developing production in Penicillin in which it is anticipated there will be heavy demand.

PEPPERMINT OIL

Subject to allocation, this important flavoring material undoubtedly is one of the major problems of the industry at the present time and reduction of supply impels either reduction or curtailment in manufactured products.

MENTHOL

Closely allied with Peppermint Oil is the new critical material Menthol. Heretofore imported largely from Japan, its present alternate supply must of necessity be derived from Citronellal, Paracymene, Pulegone, Thymol and its derivatives, Meta-Cresol, etc., or from cultivation of Mentha Arvensis. Since its wide usage as a flavoring material, rubefacient and analgesic consumes some 500,000 pounds a year, it becomes apparent that a continued shortage is in prospect for a considerable period of time. In this connection it may be noted that crystalline Racemic Menthol optically inactive has proved its worth in being admitted into both the British and German Pharmacopoeias, but to date its recognition by the United States Pharmacopoeia has not been made.

Since its general suitability has been established as equal to Menthol, and further the fact that it can be produced synthetically in the United States at considerably less cost than the present Natural or Japanese Menthol, it would seem highly desirable for the Pharmacopoeial Revision Committee to recognize Racemic Menthol. Such a step would go a long way towards stabilization of both cost and availability as well as putting the American Industry in a position of independence from Japanese sources.

Peculiarly enough, not one formula in the United States Pharmacopoeia calls for Menthol and yet in the National Formulary there are at least seven formulae calling for same.

VITAMIN PRODUCTS

In this field we have seen a continuing and expanding trend in the presentation of vitamin products in capsule and tablet form. Of special interest may be noted at this time the extensive use of hard dry gelatin capsules for polyvitamin combinations containing B factors.

With the exception of Nicotinic Acid and Vitamin A, the availability of supplies continues easier in the face of a rising tide of demand for bread enrichment, Lend-Lease, and abnormal war demands.

Significantly enough has the adoption of numerous polyvitamin combinations by the United States Pharmacopoeial Revision Committee pointed the trend to continuing demand for this type of medication in tablet and capsule form.

CONCENTRATION OF MEDICATION

Because of the need for conservation in various classes of war materials has grown a greater consciousness on the part of manufacturers of medicinal products to the necessity for conserving unnecessary weight, space, and materials, hence a continuing trend to the drys and away from liquid preparations where practicable.

NARCOTICS

While narcotic drugs are closely controlled at all times, it is worthy of mention to note that Codeine and its salts have developed rapidly in demand over recent months due to apparent increased prescriptions by physicians. A condition termed as "welder's cough" reported common to certain industrial areas, has been attributed in part to the increase.

PAPAVERINE

Papaverine known for many years as formerly derived from Opium but now obtained synthetically has gained some new interest in therapeutic value.

SULFA DRUGS

In the field of sulfa drugs we have seen a continued upward trend of broadening usage and demand created not only for use by the Armed Forces, Lend-Lease, but as well in civilian life. A demonstration of the value of these drugs for external and localized application is a continuing one, and we have a sequel in the gradual displacement of numerous serums and vaccines.

In the field of veterinary anthelmintics we have witnessed the growth of phenothiazine from a few thousand pounds in 1940 to around three million pounds for the current year, a direct contribution to the greater production of food especially in sheep raising.

OFFICIAL PRODUCTS

Probably no greater period of change in the Standards for Official Drugs has occurred than during the past two years in which we have seen the publication of the revised edition of both the United States Pharmacopoeia and the National Formulary under the Twelfth and Seventh Revisions respectively. At the same time numerous emergency changes in formulation have been required and new products added to the extent that we now will shortly have a First Supplement to the U. S. P. XII and similarly a Third Supplement to the N. F. Edition.

The addition of some thirty-three new items to the United States Pharmacopoeia as proposed in the First Supplement is indicative of the accelerations that have taken place in developments in the field of medicine and materia medica. Included also are numerous monograph changes.

Diethylstilbestrol Capsules
Hexavitamin Capsules
Totaquine Capsules
Triasyn B Capsules
Triasyn B with Liver Capsules
Liver B-Vitamins Concentrate
Dichlorophenarsine Hydrochloride
Diethylstilbestrol
Estradiol
Liver B-Vitamins Injection
Ergonovine Maleate Injection
Menadione Sodium Bisulfite Injection
Triasyn B with Liver Injection
Stronger Solution of Hydrogen Peroxide
Menadione Sodium Bisulfite
Oxophenarsine Hydrochloride
Dried Yeast
Succinysulfathiazole
Sulfadiazine
Sulfadiazine Sodium
Sterile Sulfadiazine Sodium
Sulfaguanidine
Sulfathiazole Sodium
Sterile Sulfathiazole Sodium
Diethylstilbestrol Tablets
Hexavitamin Tablets
Dried Yeast Tablets
Succinylsulfathiazole Tablets
Sulfadiazine Tablets
Sulfaguanidine Tablets
Totaquine Tablets
Triasyn B Tablets
Medicinal Zinc Peroxide

In the foregoing are included in the field of hormones, diethylstilbestrol capsules and tablets and estradiol, of the sulfa drugs—sulfadiazine, sulfaguanidine, succinylsulfathiazole, as supplementing the already included tablets of sulfanilamide, sulfapyridine, and sulfathiazole.

Here again one is impressed by the obvious trend that has occurred in the later revisions of official products; namely, the presentation of drugs in unit dosage, in tablet, capsules, and ampoule form, developments in the synthesis of numerous active principles in highly concentrated form and their ready acceptance by the revisors of official standards.

Consequently, we have seen numerous deletions from the Twelfth Revision of the United States Pharmacopoeia of some eighty-six older and less satisfactory

(*Continued on page 699*)

MEDICINE IN THE WAR

Advances in medical science are being put to the acid test in the treatment of the wounded in this war, and the results are better than was anticipated. Blood plasma and the sulfa drugs are the outstanding contributions to modern medicine that is saving so many lives in this conflict.

A REPORT on the care of the wounded tells that in World War I, one soldier was killed for every six wounded, while in World War II, one is killed for every three wounded. But in World War I, six per cent of the wounded died, while in World War II, only 3.5 per cent of the wounded die. Three main reasons are given for the favorable mortality of the wounded in this war:

1. The use of blood plasma to combat shock and hemorrhage.
2. The use of sulfonamides to combat infection.
3. The mobility and organization of medical services which insure prompt and efficient medical and surgical treatment.

The report states that "Topping the list of advancements in medical science since the last war are blood plasma and the sulfa drugs. They have already saved hundreds of lives in this war, and the figure is expected to run into thousands before the war ends."

Other interesting excerpts are:

"However, medical officers caution against regarding blood plasma and the sulfa drugs as cure-alls. Most battle casualties require surgery, and it still takes a surgeon for that. The plasma and sulfa drugs put the body in condition for surgical treatment, and the surgeon takes over from there.

"Capt. Winchell M. Craig, Chief of Surgery at the Naval Medical Center at Bethesda, Md., put it this way: 'In the last war when a man's head was cut open by a shell fragment the surgeon had to operate at once, even though the patient was in such a weakened condition that he hadn't one chance in a hundred to survive the operation. The surgeon had no other choice; he knew if he waited, infection would set in and that would be the end. In this war it is different. The patient is given plasma to build him up, sulfa to check infection, and if his condition permits he is flown to a hospital to the rear where the operation is performed under ideal conditions.'

"Maj. Gen. Albert W. Kenner, Assistant Surgeon General of the Army, credited blood plasma with saving the lives of many of the 400 American sailors who were burned when their ship was blown up five miles out from Casablanca.

" 'They were brought ashore and we got them into the casino which we had set up as an emergency hospital,' General Kenner said. 'All through the night we administered blood plasma, and by five the next morning the last of the 400 had been treated and bedded down. Of the 400, a hundred had been burned so badly that they would have died under the old method of treatment. We treated them for 48 hours, repeating the dose when necessary. We lost only two of them while we had them. As they were sailors, we turned them over to the Navy for further treatment. I heard later that two more died subsequently—a total of four deaths out of more than 400 burn cases.'

" 'Percentage-wise, we're not going to lose nearly as many of the extremities in this war as we did in the last,' said Lieut. Com. C. W. Johnson, Navy surgeon at the U. S. Naval Hospital at Bethesda, Md. 'We lost legs in the last war chiefly from shock, infection and hemorrhage. Now we administer plasma for shock and loss of blood, and sulfa drugs for infection, with a minimum loss of extremities.'

" 'Contrary to what seems to be a popular conception, sulfa drugs don't kill infection bacteria,' said Commander Johnson. 'They hold the bugs in check until the natural defense mechanisms of the body are able to kill the bacteria.'

"The new drug, penicillin, prevents the growth of new infection bacteria, and Army and Navy medical officers have high hopes for it. It is being tried out in ten Army and numerous Navy hospitals in this country in the treatment of osteomyelitis and other serious types of infections which will not respond to sulfa drugs.

Why Good Collapsible Tubes are Sometimes Hard to Get

AMERICA'S fighting forces are using more and more Sheffalloy Tubes. As their numerical strength increases and active fighting grows, a larger percentage of our production is required to package the essential medicinal and pharmaceutical ointments our service men and women need.

The overwhelming majority of our customers understand that these are the reasons why shipments are sometimes delayed. When Uncle Sam upsets our shipping schedules (particularly on the very low or unrated orders) be assured we *appreciate* your patience and consideration. We'll bend every effort to ship your tubes as quickly as we can. Your waiting will be amply rewarded by the greater product protection given by these tougher "Sheffield Process" Tubes!

Sheffalloy TRADE MARK REGISTERED

SHEFFIELD PROCESS TUBES

NEW ENGLAND COLLAPSIBLE TUBE COMPANY

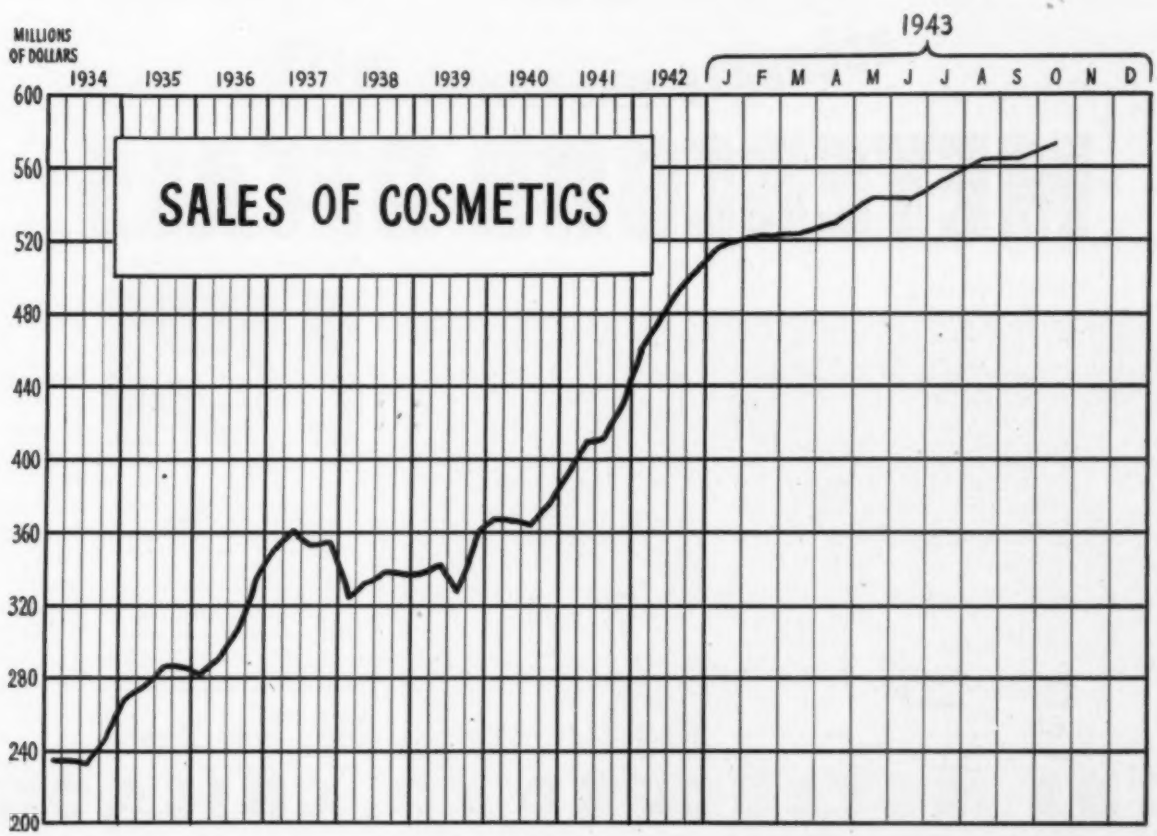
3132 SO. CANAL STREET, CHICAGO • NEW LONDON, CONN. • W. K. SHEFFIELD, 500 FIFTH AVENUE, NEW YORK
THE WILCO COMPANY, 6800 McKINLEY AVENUE, LOS ANGELES, CAL.

MERCHANDISING NEWS and PACKAGING NOTES

Paper Packaging and Shipping

It is reported that no less an authority than Donald Nelson has made the statement that at the present time paper is the most critical single material. The seriousness of this situation was beginning to make itself felt late in the summer so that many of the manufacturers in this field have already started to do something about it. Many others, however, have delayed, evidently believing that the thing would work itself out. However, the outlook is for the paper shortage to get worse before it gets better and certainly for the first half of 1944 nothing hopeful is indicated. After the middle of the year the situation will ease somewhat in the opinion of most of those in closest touch with it but for the first six months the shortage of paper can be nothing but critical.

Since most of those in this field work well ahead on packages, the most immediate pinch, and one already being felt, is in the field of shipping containers. As we pointed out last month, you can't sell goods that you can't deliver and you can't deliver without shipping cases. The present restriction on use is 65 per cent of 1942 and unless



Sales of cosmetics for the twelve-month period ended October 1943 totaled $573,514,000, an increase of $8,558,000 over the $564,956,000 reported for the twelve months ended with September 1943.

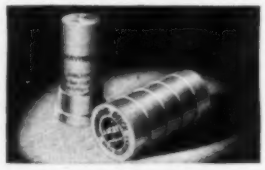
PRODUCTS THAT STAND OUT . . . SELL OUT

These colorful Don Juan plastic lipstick containers are decorated with little Decal figures of soldiers, sailors, etc., for the patriotic girl. A product of Don Juan, Inc., 67 Vestry St., New York.

DECORATE PACKAGES WITH

MEYERCORD DECALS

Modern packages deserve smart, modern nameplates and decoration. Investigate the unlimited effects in color and design obtainable with genuine Meyercord Decalcomania. Any trademark or decorative design, in any number of colors, can be reproduced in any size—for application on glass, wood, plastic, glazed crockery, etc. Special production line techniques provide speedy, economical application on flat or curved surfaces. The durability of Meyercord Decals protect your brand-mark for the life of the product . . . and serve as permanent salesmen for repeat purchases. Free designing service. For full details write Department 1412.



The trend in modern package identification and decoration is to Meyercord Decals. Solon Palmer, Inc., New York, N.Y. identify the cleverly designed blond wood container of their famous ASCOT Shaving Soap with a multi-colored Meyercord Decal Trademark (brown, yellow and red) as illustrated above. Remember...if your product stands out . . . it sells out!

World's largest producers of DECALCOMANIA

Back the Attack . . . Buy War Bonds

THE MEYERCORD CO. CHICAGO

Main plant and general offices: **5323 WEST LAKE STREET, CHICAGO 44, ILLINOIS**

Sales offices in principal cities of U. S. A., Mexico and South America

YOU WANT MERCHANDISE
AND
WE HAVE MERCHANDISE TO SHIP YOU
BUT
The only way we can get it to you is in Shipping Cartons
The Government Needs Cartons for Bombs and a Million
other things with which to blast the Axis powers off the face of the earth
and has quite rightly limited the use of cartons for civilian purposes.
THEREFORE
As a gesture of co-operating in our war effort and as a means of helping yourself we ask that you open carefully the cartons in which our goods are shipped to you and return them, together with their liners, to us by express collect for re-use.
Upon receipt of same we will credit your account with ten cents for each carton, with liner, received from you in usable condition. Hitler and Hirohito won't thank you but we will!
JOHN HUDSON MOORE, Inc.
663 FIFTH AVENUE • NEW YORK 22, N. Y.

you can cram more into the containers, find something else to ship in, make some provision for salvaging and re-using containers, or all three, you are automatically restricted to doing 65 per cent of your 1942 business.

John Hudson Moore has made a direct attack on the re-use angle by using a large sticker on each carton which says, "For return of this carton for re-use REWARD. See inside notice." The notice inside reads as follows:

"You want merchandise and we have merchandise to ship you but the only way we can get it to you is in shipping cartons.

"The government needs cartons for bombs and a million other things with which to blast the axis powers off the face of the earth and has quite rightly limited the use of cartons for civilian purposes.

"Therefore as a gesture of co-operating in our war effort and as a means of helping yourself we ask that you open carefully the cartons in which our goods are shipped to you and return them, together with their liners, to us by express collect for re-use.

"Upon receipt of same we will credit your account with ten cents for each carton, with liner, received from you in usable condition. Hitler and Hirohito won't thank you but we will!"

The National Wholesale Druggists Association has also entered the salvage and now many of its members are marking cartons with stickers asking that they be opened carefully and returned truck collect in groups of 40. This group has its truck drivers and salesmen follow through on this and succeeds in getting a high percentage of usable returned cartons.

Each manufacturer knows best how to handle his own case and so long as each one does something about it, the thing can be licked. Pulp mills are currently working on a current average inventory which is lower than ever before in their history. All papers stem from the same source which is wood and all kinds of paper must be saved and salvaged if we are to get through this period. Save waste paper yourself and see that others in your community save it and that it gets to collection depots. If you are in a mill area where manpower shortage is holding up the supply of cut wood inquire into some of the methods for getting voluntary wood cutting drives started or encouraging farmers to cut wood during this season of the year which is generally slack for them. The Pulp and Paper division of WPB has plans of this sort which have been tried and which work and will furnish information upon this wood cutting problem which is not the same nationwise and can only be done in certain areas. So write first if you think you are in a pulp area and want to do something about it.

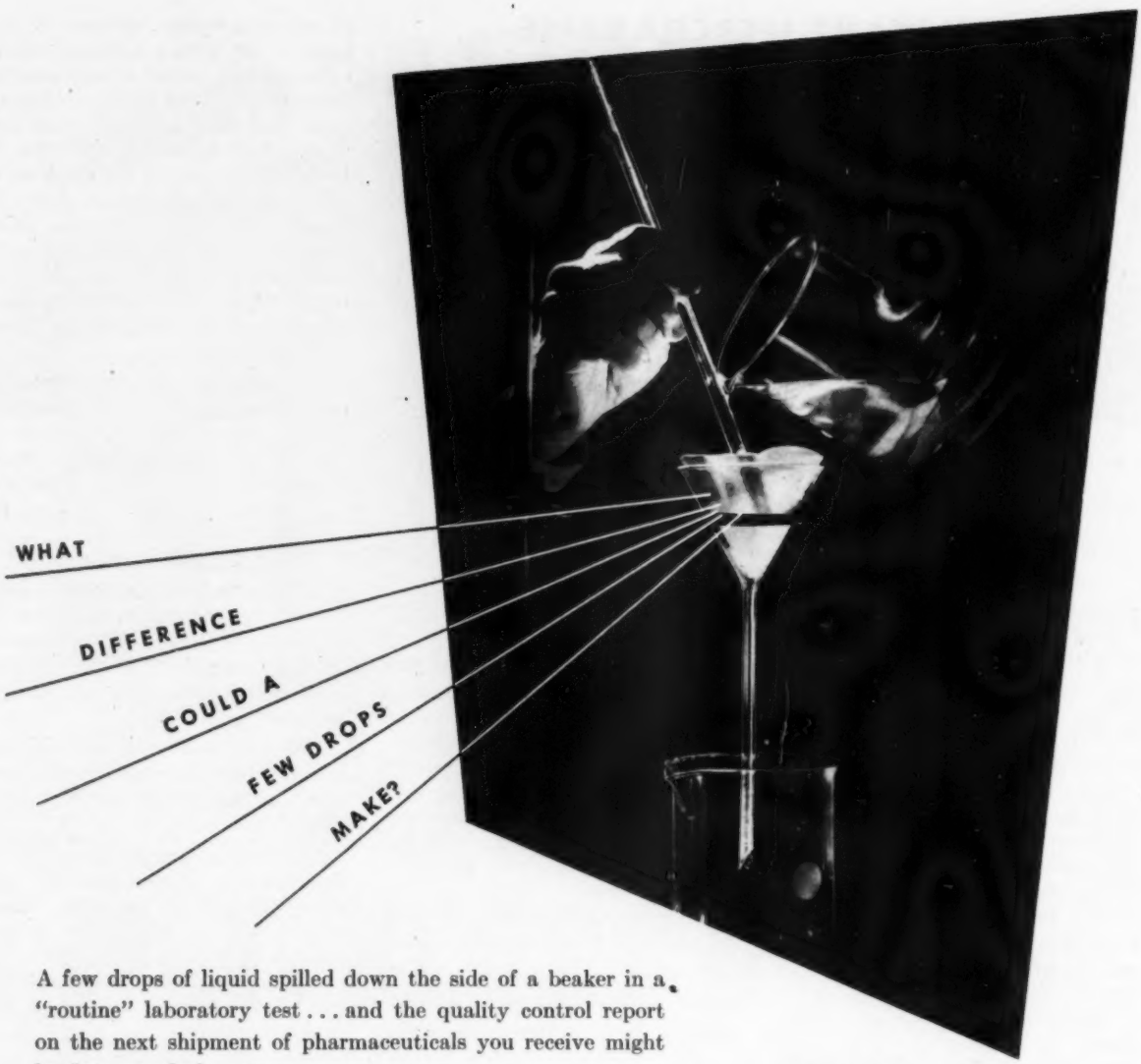
But everybody can save paper and don't think that it won't help even if you just refuse a paper bag for a loaf of bread or a box of cereal which is already well wrapped and needs no further paper around it.

Courtley's Position

We have received a most interesting letter from Mr. S. Wasserstrom of Courtley, Ltd., which is self-explanatory and which we print in full. Need we add that such contributions are always welcome!

"We read with much interest your article, 'Men's Cosmetics—A Big Business,' on Page 279 of your September Issue.

"As the pioneer in this specialized industry, we have been a great factor in creating the rapidly increasing volume of sales of men's toiletries and we can forsee in the future a place for this type of merchandise that will rival what has been accomplished in the field of cosmetics for women.

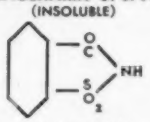


A few drops of liquid spilled down the side of a beaker in a "routine" laboratory test . . . and the quality control report on the next shipment of pharmaceuticals you receive might be dangerously in error.

Few operations in all industry are governed as completely by precise, automatic controls as the production of fine chemicals and pharmaceuticals. Yet few are as dependent on the skill and painstaking accuracy of the men in control.

That's why Monsanto's control laboratories are staffed by highly skilled chemists, trained alike in fundamentals of good laboratory practice and the latest analytical techniques. And that's why you can be sure of *controlled* quality in *every* shipment of *every* Monsanto pharmaceutical that reaches your plant. MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, St. Louis, Missouri.

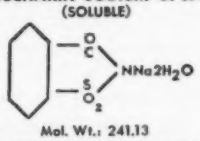
SACCHARIN U. S. P.
(INSOLUBLE)



Mol. Wt.: 183.11
Standard Form: powder.

Specifications: White crystalline powder; assay 98.0% min.; m.p. 227.0°C. min.; loss on drying, 0.50% max.; solubility in 10% Na_2CO_3 (1:5), complete.

SACCHARIN SODIUM U. S. P.
(SOLUBLE)



Mol. Wt.: 241.13
Standard Forms: granules, powder.

Specifications: White crystals or powder; solubility in water (1:8), complete. Loss on drying at 125°C. granules, 14.00% min. —14.35% max.; powder, 5.3% min. —5.8% max.

MONSANTO CHEMICALS
SERVING INDUSTRY...WHICH SERVES MANKIND

The Cosmetic Trend

Talking to buyers (Department store, Drug and Chain store) one gains the impression that they are not unduly worried about the condition of their cosmetic counters during the coming year. Quite apart from the fact that no serious shortages are foreseen at this time, most buyers operate on the principle that they will buy and sell what is available, and not try to force a situation over which they have no control. If any item should become short, temporarily, it will not be pushed for the time being, so to conserve the available stock, until it comes back again in usual quantities. The theory is that the variety of the counters should be maintained, so that there is no need to send customers of special brands away;—but that the easily obtainable items should get the right of way in the interest of building up all-over volume.

Arguing correctly that there will be fewer new customers during the coming year, but that the existing ones will be able to afford better merchandise, most buyers feel that they can do better by pushing the more expensive grades, if obtainable, and the larger sizes. In fact, there is a growing conviction among many department store buyers that the excessive attention that was paid by them to low-unit price customers during the early months of the war, has brought the wrong type of trade to their counters. While floor traffic statistics and departmental sales-slip counts are not convincing, there is certainly no evidence of an increase of the number of transactions at the lower priced counters. The size of the average sales-slip in practically all the better type stores has increased.

However, even with these reservations in mind news of shortages is closely watched. Cosmetics and toilet goods sales have boomed in comparison with other departments and store executives are more interested today in their cosmetic counters than ever. More space is allotted to them in window displays and good novelties are looked at readily.

Because the Christmas season started earlier this year cosmetic gifts were bought well already during November and there may be less of the usual post-Christmas let-down. Orders for cosmetics from southern stores are approximately 10% ahead of last year. Winter sport business in the North may be less, but is fully made up by the increase in the demand for occupational cosmetics, many of which duplicate the conventional winter lines.

Department stores and drug stores in the medium sized cities expect to be pretty much cleared out of their cosmetic gift-ware after Christmas, because of wide gaps in some of their other gift displays.

"Our attention has been called to an inaccuracy in your article, which we should like to correct here, feeling that you in turn will want to make the correction to your readers.

"Your article gives the impression that Seaforth was the first firm to sell men's preparations exclusively and to merchandise them as a specialty. As far as we know, however, Courtley—and not Seaforth—was the first to do this.

"The Courtley line was originated in the fall of 1938 as a high-grade line of men's toiletries to be sold on an exclusive basis to the country's leading stores. During that season, business was done by us on an experimental basis on the coast, but the success of the line was so phenomenal that in the following year a sales organization was set up for the entire country. As a matter of fact, Courtley has been successfully merchandised in volume in the better stores since 1939, which is some time before Seaforth came on the market.

"Inasmuch as your magazine is always on the alert for different packaging ideas, you will be interested to know that Courtley is the only line whose refillable containers are made of genuine porcelain and not pottery.

"Furthermore, as far as we know, Courtley is the only line that selects its dealers with care, granting exclusive distribution to the better stores in each community.

"Your article over-looks one new and extremely important outlet for the sale of men's toiletries. This is the high-grade men's stores. It was Courtley with its beautiful, distinctive and highly masculine package who convinced the high-grade men's stores that they could, and should, feature men's toiletries preparations in their stores.

"Today you will find Courtley not only in the toiletries departments of department stores and the better drug stores, but also in the men's departments of the department stores, and in the exclusive men's shops throughout the country. The sale of men's toiletries in men's stores has progressed by leaps and bounds, due mainly to the large success that these stores have had with Courtley.

"Although Courtley does not have as widespread volume as some of its competitors, it is considered as truly the 'Aristocrat of Men's Toiletries' by the exclusive stores of the country, most of whom eagerly seek the Courtley franchise.

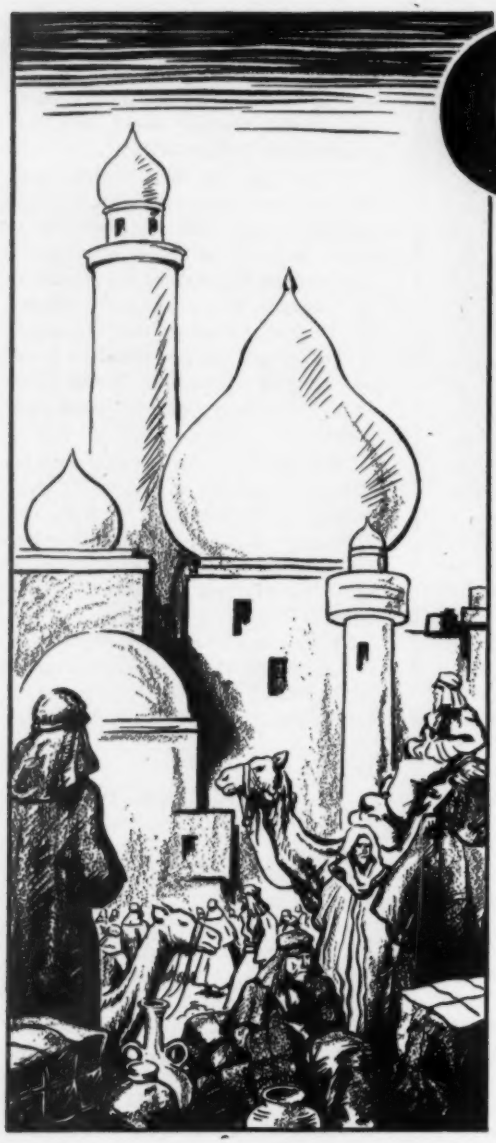
"If we can give you further information regarding our line or our experience in the field of men's toiletries, please do not hesitate to call on us."

Brushes

One of the shortages which has never received very much publicity is the shortage of brushes used for manicure preparations and for eyelash and eyebrow preparations. The latter difficulty has apparently been met by the development of brushes made of feather. It is claimed that these feather mascara brushes may be used both to apply and wipe off mascara. It is also claimed that they are thinner than the ordinary brush and easier to get into small spaces. They come in all natural feather colors and are easy to clean and those who have already adopted them are said to be well pleased with their performance.

Accent on Face Powder

With fashion showing many low neck dresses not only for evening, but for daytime, Lucien Lelong is building its advertising around "Lucien Lelong's face powder—will make the throat and shoulders lovely, too." In other words, Lucien Lelong is promoting the use of face powder on the neck and shoulders as well as the face, which appears to be a good idea particularly since so many women overlook how badly a powdered face and unpowdered neck can be. The campaign to use more face powder correctly has been launched with a new face powder and package. This is a generous five ounce size, and the con-



GUM
KARAYA
TRAGACANTH
ARABIC
LOCUST

ORBIS GUMS, whole or powdered, are the products of expert experience of forty-three years standing in the selection of fine raw materials and in milling to guarantee complete satisfaction for your most exacting technical requirements.

ORBIS GUMS can be obtained in any mesh from the finest powder to the various granular forms used to a great extent in the drug field—ground in our modern mill at Newark, New Jersey.

ORBIS KARAYA GUM in fine powdered form is specially adaptable for "Wave Sets."

Please let us know your requirements. Working samples upon request.

ORBIS
PRODUCTS CORPORATION

215 PEARL STREET, NEW YORK - FACTORY & LABORATORY, NEWARK, N. J.

CHICAGO
660 North Dearborn St.

PHILADELPHIA
610 Brown Bldg.

BOSTON
89 Broad Street

MEMPHIS, TENN.
1620 Carr Ave.

Water Soluble Gums	Waxes	Cosmetic Raw Material	Fruit Flavors
Thymol	Stearic Acid	Oleo Resins	Food Colors
Aromatics	Essential Oils	Perfume Bases	Quince Seed
Rice Starch	Zinc Oxide French	Olive Oil	Irish Moss

Season's Greetings

ALBERT VERLEY & COMPANY

"GIFTS OF FRANKINCENSE AND MYRRH BROUGHT FROM AFAR"

Season's Greetings

ALBERT VERLEY & COMPANY AROMATICS

232 EAST OHIO STREET, CHICAGO, ILLINOIS · 114 EAST 25TH STREET, NEW YORK

MEFFORD CHEMICAL COMPANY, LOS ANGELES

tainer has been designed with a view to being a decoration for any dressing table. It is not only a pretty accessory for the dressing table but in these days of shortages, a smart idea in packaging since the container is made completely of glass. There are six shades, rose rachel, mauve rose, peche, southwind, rose beige and Brazilian, and the face powder sells for $2. The promotional idea behind this campaign combined with the new packaging of its face powder gives Lelong an excellent opportunity to sell more face powder than before. Since Lucien Lelong was essentially a perfume and cologne house in pre-war days, the face powder promotion is a logical move in view of the cologne situation.

In the mass field, and not for the same reason as Lelong, Tangee has been running a tremendous campaign on its new Tangee Petal-Finish face powder. The Tangee face powder sells for 50 cents and $1.00 per box and with this campaign behind it steadily pounding away at what Petal-Finish face powder can do to achieve a beautiful finish, it may well make its mark in the popular price face powder market.

Add Men's Lines

Jean Vivaudou is introducing a new line of men's toiletries which will be known as Orloff's "Bergamot." The containers are jet black decorated with gold and are replicas of old apothecary jars. As a matter of fact, the whole set up is a clever one since Jean Vivaudou has utilized the same moulds for its men's line as are used on its Orloff Attar of Petals toiletries. The difference in decor is the distinguishing mark between the feminine and masculine packages. The product pictured is the shaving soap which comes in a handsome black and gold mortar and pestle. There are eight other products in the line, ranging in price from $1.00 to $5.00.

Another men's line which is still talked about in whispers will be launched along about March or April of next year. It will be known as "Man of Manhattan." Clever packaging and merchandising and an extensive advertising campaign will launch the new line.

Perfume Powder

Moonlight Mist Perfume Powder by Princess Gourielli, follows the new trend in fragrance—dry perfume. Moonlight Mist Perfume Powder is a dry fragrance designed to be used directly on the skin. It is also adaptable for the conventional sachet use in little cases or bags that will hold the powder securely. The advantages of a dry perfume are especially timely these days, since no alcohol is needed in its manufacture. The powder itself has the clinging quality of a fine face powder and the skin retains the scent very well. It is economical because only a touch is necessary at strategic perfume points—back of the neck, behind the ears, within frock neckline, decolletage, crook of the elbow, or about the wrists. Warmth of the skin mellows and releases the fragrances so that the user as well as her clothing are subtly permeated with it. This dry perfume makes a charming gift for all ages, at all seasons, and it is suggested especially for women in the service. The container travels compactly and safely. Moonlight Mist Perfume Powder comes in a blue porcelain apothecary jar, which when empty makes an attractive catch-all for gadgets. It retails for $2.50.

Paper Caps

There continues to be much talk and some developments in the paper cap field although, it must be confessed, but few deliveries. The last one we've seen which appeared worthy of note was one which wasn't much in the way of appearance but had something extra special in the way of construction. The thing was made with a two-piece construction ingeniously devised so that the more you tighten up on the thread the tighter the seal, because of an out and up pressure. And the sidewalls bearing the thread were so rigid that there appeared to be no possibility of stripping. More on this soon.

New Plastic Lipstick Case

Antoine has introduced its new Rose Point lipstick shade in a new type plastic case which has made its appearance during recent months. By simply holding on to the band, and twisting, the lipstick comes up quickly and efficiently. The base of the case may not be as smooth looking as some of the others since the tracks of the spiral are visible when the case is open, but the mechanics of it appear to be quite satisfactory. Antoine's new shade has been blended in a soft rose of depth and brilliance. Rose Point lipstick retails for $1.50 and refills are available at 75 cents.

LABORATORIES

• Rouge • Powder • Lipstick • etc.

KOLMAR continues to be a synonym for quality — a reflection of our unswerving devotion to an ideal.

Manufacturers of private label brands only.

Representatives

Mr. M. C. Boyd,
Quinby Building, Newark, N. J.

Mr. Douglas Haggerty,
122 E. 42nd St., New York City

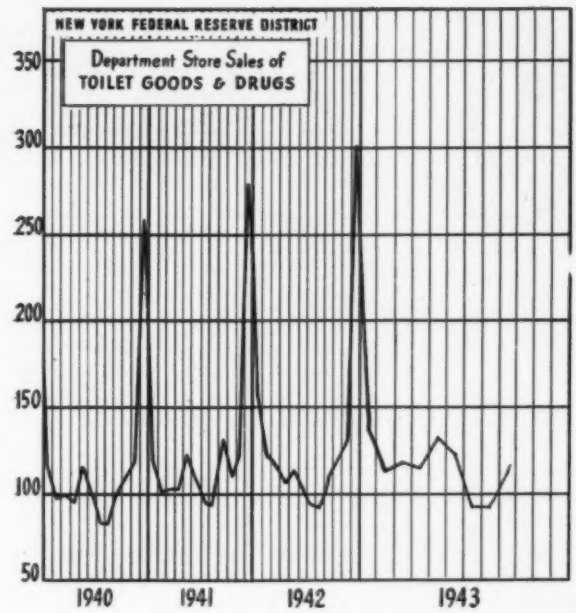
Mr. Warren Curry,
2504 Alton Road, N. W., Atlanta, Ga.

Mr. Norman Kole,
980 Merchandise Mart, Chicago, Ill.

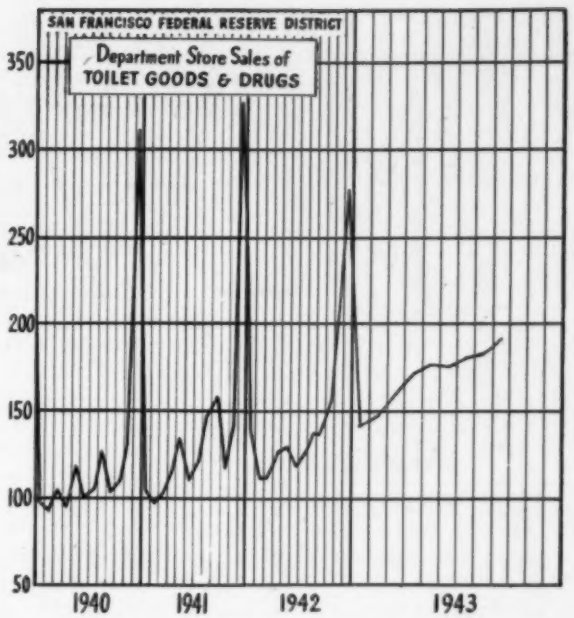
Mr. R. F. G. Byington,
1260 N. Western Ave., Los Angeles, Cal.

Mr. Richard F. Spicker,
419 West Fifth St., Cincinnati, Ohio

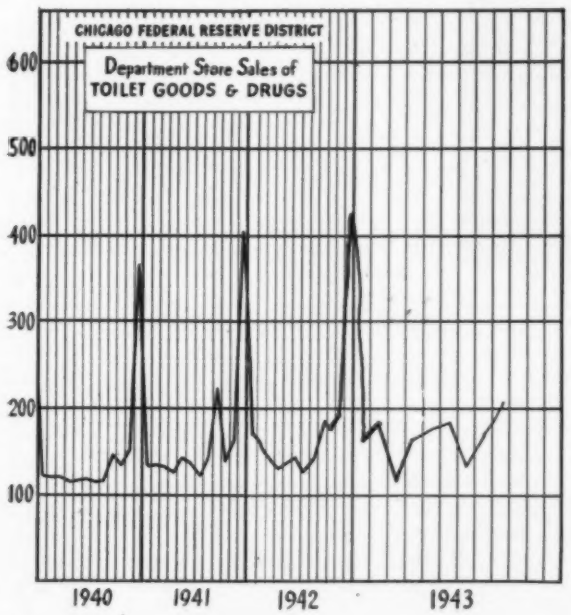
Milwaukee · Newark



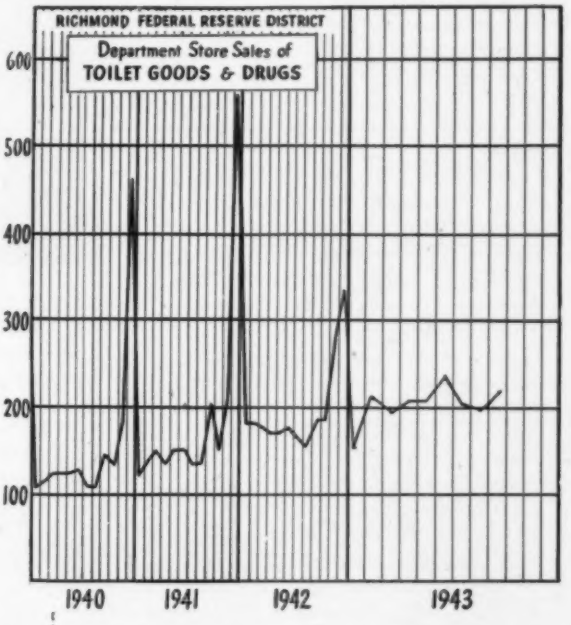
Sales of toilet articles and drug sundries by department stores in the New York Federal Reserve District increased in September 1943 as compared with sales in September 1942. This corresponds to unadjusted index numbers of 115 for September 1943; 92.9 for August 1943 and 110.6 for September 1942.



Sales of toilet articles and drug sundries by department stores in the San Francisco Federal Reserve District were greater in September 1943 than they were in September 1942. This corresponds to unadjusted index numbers of 192.5 for September 1943; 184.1 for August 1943, and 136.5 for September 1942.



Sales of toilet articles and drug sundries by department stores in the Chicago Federal Reserve District were greater in September 1943 than they were in September 1942. This corresponds to unadjusted index numbers of 205.7 for September 1943; 169.1 for August 1943 and 185.8 for September 1942.



Sales of toilet articles and drug sundries by department stores in the Richmond Federal Reserve District were greater in September 1943 than they were in September 1942. This corresponds to unadjusted index number of 218.6 for September 1943; 198.4 for August 1943 and 188.5 for September 1942.

NEWS

Associations

E. T. T. Williams Heads DCAT

E. T. T. Williams, of Becton, Dickinson & Co., Rutherford, N. J., was elected chairman of the Drug & Chemical Section of the New York Board of Trade at the first meeting of the newly elected executive committee of the section held December 9. Guy L. Marsters, of the Norwich Pharmacal Co., New York, was elected vice-chairman. Robert B. Magnus, of Magnus, Mabee & Reynard, was reelected treasurer.

The Drug, Chemical and Allied Trades Section of the New York Board of Trade held its 53rd annual meeting and election at the Drug and Chemical Club, November 16 with over 100 executives present. Victor E. Williams, director of sales of Monsanto Chemical Co., presided. Julius Henry Cohen addressed the meeting on the subject, "Government War Contract Cancellations." He drew on his first-hand experience with cancellations after the last war and his background as general counsel for many years for the New York State Chamber of Commerce and Port of New York Authority.

The officers of the Section including the chairman; Robert B. Magnus, treasurer; Carl M. Anderson, counsel; Helen L. Booth, acting secretary; and Gaines H. Gough, Washington representative, reported on the work of the Section during the past year. Harold M. Altshul, chairman of the membership committee, reported a total of 52 new members for the year, stating that the roster now includes some 424 member firms—an all-time high.

John J. Toohy, manager of distribution, E. R. Squibb & Sons, was elected the Section's representative on the board of directors of the New York Board of Trade for the coming year, a post held by Ralph E. Dorland, of the Dow Chemical Co., since last June. Mr. Dorland completed the unexpired term of the late Francis J. McDonough of the New York Quinine & Chemical Works.

The report of the nominating committee, presented by Philip M. Dinkins, chairman, was approved and the following individuals were elected to serve on the executive committee for the coming year: Harold M. Altshul, Ketchum & Co., Inc.; Carl M. Anderson, Merck & Co., Inc.; William H. Berg,

E. T. T. WILLIAMS

Winthrop Chemical Co.; Carle M. Bigelow, Calco Chemical Division, American Cyanamid Co.; Hugh S. Crosson, McKesson & Robbins, Inc.; James DeCesare, White Laboratories, Inc.; Grover C. Hollings, Eli Lilly & Co.; R. J. Ingram, Bristol Myers Co.; Elvin H. Killheffer, E. I. duPontde Nemours & Co., Inc.; Arthur J. Kinsman, Purepac Corp.; Charles L. Lightfoot, Anchor Hocking Glass Corp.; Robert B. Magnus Magnus, Mabee & Ryenard, Inc.; Guy L. Marsters, The Norwich Pharmacal Co.; Paul Miller, International Cellucotton Products Co.; Harold D. Pomeroy, G. S. Stoddard & Co. Inc.; Robert J. Quinn, The Mathieson Alkali Works; J. P. Remensnyder, Heyden Chemical Corp.; Lloyd I. Volckening, the Iversen Lee Co.; William J. Weed, Niagara Alkaloid Co.; and E. T. T. Williams, Becton, Dickinson & Co.

Lund Again Heads Packaging Inst.

Joel Y. Lund, vice-president, Lambert Pharmacal Co., St. Louis, was reelected president of the Packaging Institute for another year at its annual meeting held November 4 and 5 at the Hotel New Yorker, New York.

George A. Mohlman, president, Package Machinery Co., Springfield, Mass., was elected a director of the Institute and president of the Packaging Machinery Manufacturers Institute, Inc.

Foragers Annual Banquet and Meeting

The Foragers of America will hold its annual membership meeting at the club rooms, Midston House, New York, on December 29. The Foragers' 47th annual banquet will be held on Saturday, January 8, 1944, at the Midston House. The entertainment committee has made arrangements for an interesting evening in keeping with the times.

A.P.M.A. Winter Meeting

The mid-year war meeting of the American Pharmaceutical Manufacturers' Association at the Waldorf-Astoria Hotel, New York, December 13 and 14 was divided into five sessions as follows: December 13 morning, scientific session; December 13 afternoon, scientific award ceremony; December 13, evening, executive session; December 14 morning, war session; December 14 afternoon, production session.

The association's annual scientific award was made to Dr. Alexander Fleming, professor of bacteriology at London University, for his discovery of penicillin; and to Dr. Howard Walter Florey, professor of pathology at Oxford University, for his study of penicillin The award was made jointly and in absentia on nomination by an advisory committee consisting of Dr. George R. Cowgill, associate professor of physiological chemistry at the Yale Medical School, and Dr. Howard B. Lewis, professor of physiological chemistry at Michigan Universitv.

The program dealt with war medicine and included an introductory statement by Dr. Cowgill and addresses by: Surgeon General Norman T. Kirk, U. S. Army—"Army War Medicine;" Acting

ADVERTISEMENT — *This entire page is a paid advertisement.* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

December ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1943

Diethyl Oxalate Supplements Scarce Lacquer Solvents

Reagent Uses Also Afford Many Possibilities in Synthesis

Although in the past diethyl oxalate has found its greatest use in organic synthesis, it is today being employed in substantial quantities to replace and extend critically short nitrocellulose solvents.

Diethyl oxalate is an excellent solvent for nitrocellulose and has a slow evaporation rate. While its applications have previously been limited to specialized fields, due to its tendency to hydrolize, it is now being used very successfully where special care is taken to eliminate all possible water from the formulation. It is recommended that wherever possible diluents with high aromatic content be used inasmuch as diethyl oxalate has a much higher dilution ratio with aromatic hydrocarbon diluents than it has with petroleum naphthas.

Diethyl oxalate offers many possibilities in chemical synthesis. Here are a few typical examples:

1. With ethyl acetate in the presence of sodium ethoxide (sodium ethylate) it yields ethyl sodium oxalacetate.

2. With acetone in the presence of sodium ethoxide, it yields xanthochelidonic acid ester (acetone dioxalic ester) from which the ethyl ester of chelidonic acid may be obtained. Gamma-pyrone may in turn be obtained from this latter substance.

3. With zinc and alkyl iodides, it gives ethyl esters of dialkylglycolic acid.

4. With sodium amalgam, the alcoholate of ethyl glyoxylate, ethyl oxomalonate, ethyl racemate, and the ethyl ester of desoxalic acid may be obtained. From this latter acid there may be obtained by reacting with phenylhydrazine, the phenylhydrazone of ethyl glyoxylate.

5. Electrolytic reduction gives ethyl glyoxylate.

6. With sodium ethoxide and urea, it gives parabanic acid (oxalylurea).

7. It is used to manufacture phenobarbital.

8. With ortho-nitrotoluene there results an alcohol condensation product containing a third group in the benzene ring.

9. By distilling with an alcohol other than ethanol the oxalic ester of the alcohol may be obtained through alcoholysis.

Patents New Protective Treatment for Textiles

A Canadian Patent has been granted covering the use of trichlorobenzyl phenyl ether dissolved in alcohol or acetone as a mothproofing agent for textiles. It is mixed with salicylanilide as a fungicide or with pyrethrum as an insecticide.

New Anti-Rust Compound Is Announced by U.S.I.

Extensive Use in Automotive and Industrial Cooling Systems Seen for New Powder

Improved protection for radiators and other cooling-system surfaces is made possible by a new anti-rust compound in powder form, recently developed by U.S.I. Orange in color, the powder works equally well with water or any type of anti-freeze solution. Two ounces will protect a five-gallon capacity automobile cooling system.

Use of an inhibitor of this type in automobile cooling systems is particularly advisable this winter where anti-freeze solutions are being re-used, as the rust-inhibiting qualities originally present in the anti-freeze will have been lost.

Summer Use Important

In addition to imparting anti-corrosive properties to alcohol or permanent type anti-freeze solutions, the compound is recommended for use for summer radiator protection. Recent reports by government agencies and automotive engineering groups indicate that radiator corrosion is at its peak during the summer, due to the higher temperatures and the fact that ordinary water is so generally used as a coolant.

Protects Many Metals

Extensive tests in U.S.I. laboratories have shown that the new inhibitor will protect surfaces of a wide range of metals, including aluminum, steel, cast iron, copper, brass and solder. By keeping heat transfer surfaces clean, the product helps assure efficient cooling, thus preventing engine overheating and loss of anti-freeze from boil-over.

U.S.I.'s new compound has no effect on rubber, and therefore cannot cause trouble with radiator hoses or other rubber appliances in the cooling system. It is also entirely odorless.

Tests Possible Solvents For Tung Oil Extraction

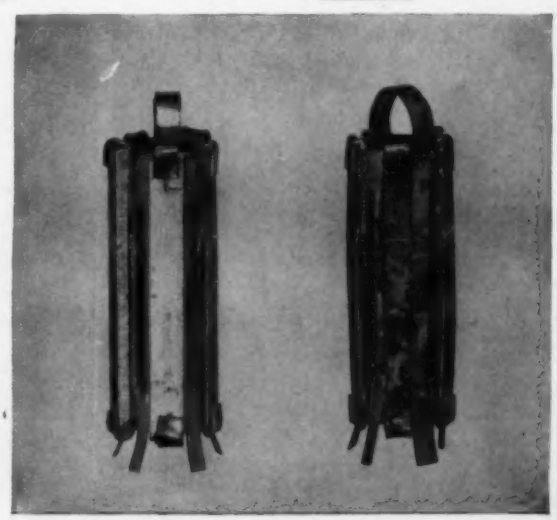
Renewed interest in the possibility of increasing the yield of tung oil from domestic fruits is reflected in a recent study of solvents which might be used in an extraction process. Out of a total of 33 solvents studied, ethyl acetate and some 10 others held the most promise, from the standpoints of quality and yield of tung oil produced and from that of economics.

The study, carried on by three Department of Agriculture scientists, points out the necessity of selecting a solvent of sufficiently high boiling point to avoid excessive vapor losses, yet low enough to prevent deterioration of the tung oil quality through exposure to unduly high temperatures.

Alkyd Resin Can Replace Phenolics in Navy Primer

The Navy Department has announced that it will now accept, tentatively, a primer based on Holabird Specification ES-680a, Class 101 for use on all Naval equipment and machinery. This is covered by Specification 52-P-26 Primer, Metal (Brown) dated June 1, 1943, and will replace the original Zinc Chromate Primer 52-P-18 (phenolic) which will be used only for the painting of ships' hulls and com-

(Continued on next page)



Unretouched photo of test bundles just as they appeared after an accelerated corrosion test simulating the most severe conditions encountered in automotive radiators. Bundles consist of strips of copper, aluminum, solder, brass, and cast iron, all crimped with good electrical contact to a steel frame. Note the corrosion and severe electrolysis which has taken place on the "control" bundle at right, which was exposed to untreated tap water. Note how clean and free from electrolysis the bundle at left is after exposure to similar tap water which had been protected with U.S.I.'s new anti-rust compound.

ADVERTISEMENT — *This entire page is a paid advertisement.*

December ★ **U.S.I. CHEMICAL NEWS** ★ 1943

Resins in Navy Primer

(*Continued from preceding page*)

partments. Until such time as the Navy can evaluate submitted samples of Specification 52-P-26 and can establish an approved list, those products now having the approval of Holabird Quartermasters Depot will be accepted by them.

Specification 52-P-26 is met completely by Aroplaz 1323-D, a product of U.S.I.'s Stroock & Wittenberg Division, which is already being used extensively in Holabird Specification ES-680a. Although this is one of the lowest priced pure alkyd resins, it is a versatile high-quality product.

Recovery of Free Acid From Pickling Liquors

Acetone has been found superior to solvents previously tried for promoting the crystallization of copperas from pickling liquor. While acetone is not satisfactory for the treatment of continuous-process liquor, batch liquor responds well from the standpoints of ferrous sulfate removal, acid concentration, quality of copperas, and acetone separation.

Reports New Remedy For Skin Ailments

Tetraethylthiuram monosulfide is reported by a British Journal to have proved effective in the treatment of scabies. The liquid preparation used was an emulsifiable oil having the composition:

Tetraethylthiuram monosulfide	25%
Polyglycerol ricinoleate	10%
Industrial methylated alcohol	65%

One part of this oil was added to four parts of water immediately before use.

Influence of Alcohols On Indicators Described

Color change of some titration indicators is reported to be markedly influenced by the lower alcohols.

The change is least pronounced with ethyl and *n*-propyl alcohol, more so with methyl, and most pronounced with iso-propyl alcohol. Impurities in the alcohol also have an appreciable effect, impossible values being obtained in the presence of ethers.

Method for Determining Chlorophyll and Carotene

Of significance to the dehydrated food and other industries is a recently announced method of determining chlorophyll, pheophytin, xanthophyll and carotene—key factors in the taste and nutritional "goodness" of vegetables.

The method involves a combination chromatographic, solvents-partition, and spectrophotometric techniques. Pigment is first extracted with acetone, then transferred to ether and subjected to direct spectrophotometric analysis for chlorophyll and henophytin. Xanthophyll and carotene are subsequently determined by chromatographic analysis.

Molasses Extender

Demand for Special Liquid Curbay as an extender for molasses in hog and dairy feed manufacture continues to grow. This U.S.I. product is also finding increased industrial use as a binder, and is said to offer interesting possibilities in the preparation of specialty agricultural products for plants and soils.

Special Liquid Curbay contains approximately 40-45% solids, can be handled just like molasses in storage or mixing equipment, and is available in tank car quantities without allocation limitations.

Determination of Water In High-Proof Ethanol

A mixture of anhydrous ethanol and bicyclohexyl exhibits a critical solution temperature of 23.4°C.; with 1 per cent of water present, this temperature becomes 41.4°, and with 2 per cent water 54.1°. Thus the critical solution temperature can be plotted against the percentage of water present and the resulting curve used for determining the water content of high-proof alcohol.

The procedure recommended is to add 4.0 ml. of bicyclohexyl to 2.0 ml. of the alcohol to be tested and stir with a dry thermometer. Heat until the solution becomes clear and then cool slowly with stirring. Note the temperature at which the mixture becomes slightly opalescent.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

Two new fatty acids, azelaic and pelargonic, described as straight chain acids containing nine carbon atoms are announced. Now in commercial production, these acids suggest new fields for investigation in textile applications, modifications of resins, plasticizers, etc. **(No. 749)**

U S I

A paint brush cleaner is offered which the maker claims will swell the bristles and loosen dried paint in 12 to 96 hours. The liquid is non-inflammable, non-fuming and harmless to the hands. It can be re-used after straining. **(No. 750)**

U S I

Low freezing points and mild odors are the featured points of a new series of plasticizers and softeners now being offered for use in coatings, adhesives, plastics, synthetic resins and rubbers, etc. A chart of the physical properties of these new products is available from the maker. **(No. 751)**

U S I

A quick-setting, tacky adhesive, developed primarily to cement cork inserts in reconditioned or new crowns, is reported to work especially well in automatic cork inserting machines. The maker states the product is odorless and non-toxic. **(No. 752)**

U S I

Preventing electrolysis and consequent boiler corrosion is the purpose of a new galvanic cell designed to hang from a tube in the boiler. The cell, it is stated, concentrates electrolytic action at its negative pole, precipitating the mineral matter for removal during blowdown. **(No. 753)**

U S I

A new plasticizer, claimed to impart striking low temperature flexibility to synthetic rubber products, is being offered to processors of Butaprene, Chemigum, Hycar, Neoprene, Perbunan and Thiokol. **(No. 754)**

U S I

A new floor cleaner, recommended also as an oil and grease absorbent for reducing fire and slipping hazards, is announced. Said to be non-abrasive, odorless, and non-injurious to skin, clothing or flooring, the product will absorb up to 50% of its weight of oil or grease. **(No. 755)**

U S I

Stable, uniform oil emulsions are said to be produced at higher speed with the aid of a new group of soluble resinates. Sodium and potassium salts of selected resins, these resinates are useful in the manufacture of cutting oils, polishes, paints, and many other products. **(No. 756)**

U S I

A new gas mask, approved for use in the presence of acid gases, organic vapors, ammonia, carbon monoxide and toxic smokes, where sufficient oxygen is present to support life, is announced. Shatter-proof lenses, an arrangement to prevent lens-fogging, and a dial which indicates safe remaining service time are incorporated in the design. **(No. 757)**

U S I

A new paint remover is reported to cut through the toughest film, leaving a clean, neutral surface that requires no after-washing or neutralizing. The product is said to be waxless, involve a minimum of fire and toxic hazards. **(No. 758)**

U.S.I INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND ST., NEW YORK 17, N. Y. — CHEMICALS · RESINS · ANTI- · SOLVENTS · ALCOHOLS · FREEZE · USI SERVICE TO INDUSTRY — BRANCHES IN ALL PRINCIPAL CITIES

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined
Ethanol (Ethyl Alcohol)
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96%, Absolute
Super Pyro Anti-freeze
Solox Proprietary Solvent
ANSOLS
Ansol M
Ansol PR

ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate
OXALIC ESTERS
Dibutyl Oxalate
Diethyl Oxalate
PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate
OTHER ESTERS
Diatol
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate
ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.
RESINS
Natural
Synthetic

ACETONE
Chemically Pure
FEED CONCENTRATES
Curbay B-G
Curbay Special Liquid
Vacatone 40
OTHER PRODUCTS
Collodions
Ethylene
Ethylene Glycol
Indalone
Nitrocellulose Solutions
Urethan

Registered Trade Mark

Surgeon General Warren F. Draper, U. S. Public Health Service—"Civilian War Medicine;" Dr. Chester S. Keefer, professor of medicine at Boston University School of Medicine, chairman of committee on chemotherapeutic and other agents, division of medical sciences of National Research Council—"Research Physician in War Medicine;" Dr. O. H. Perry Pepper, professor of medicine at Pennsylvania University School of Medicine—"Medicine in War and After;" Dr. Charles Thom, formerly principal mycologist U. S. Bureau of Plant Industry (etc.) and author of "The Penicillia"—"Mold Research in War Medicine;" and Dr. George A. Harrop, director of Squibb Institute for Medical Research—"Pharmaceutical Development in War Medicine."

The program of the war session, held the morning of December 14, included addresses by: Lt. Col. Howard F. Currie, commanding officer, Army Medical Purchasing Office—"Army Medical Purchasing Office;" Lt. Col. Ralph R. Patch, chief of production and facilities branch of Procurement Division, Office of Surgeon General, U. S. Army—"War Manpower;" Major E. P. Platt, chief of contract terminations and surplus property section, Army Medical Purchasing Office—"Surplus Government Drug Stocks;" Hon. Wendell Berge, Assistant U. S. Attorney General—"Significance of Antitrust Law in Postwar Period;" Dr. Thomas A. McGoldrick, president of New York State Medical Society—"Problem of Essential Medical Care;" A. C. Nielsen, president of A. C. Nielsen Co.—"War Impact on Drug Distribution;" and Charles Wesley Dunn, of New York Bar, general counsel for the association—"Postwar Observations."

Jewish Charities Dinner

The Cosmetic and Drug Division of the New York and Brooklyn Federation of Jewish Charities held its annual dinner Thursday, December 9, at the Hotel Astor. Herman L. Brooks, president of Coty, Inc., and William F. Murtha, of Bloomingdale Bros., New York, are co-chairman of the division.

T.G.A. Convention

The Toilet Goods Association, Inc., has selected May 18 and 19 for its 1944 convention. The meeting will be held at the Waldorf-Astoria Hotel, New York. L. R. Root of Scovill Mfg. Co. will again serve as chairman of the convention committee.

Proprietary Assn. Scientific Meeting

The scientific section of the Proprietary Association held its mid-year meeting December 8 at the Biltmore Hotel, New York. The program included the reading of the following papers: "Cooperative Research and Industry," by Dr. R. L. Conklin, vice-president, The Institute for the Study of Analgecis and Sedative Drugs; "Changes and Trends in Medicinal Drugs After Two Years of War," by Dr. Edward C. Merrill, assistant vice-president, United Drug Co.; "Control and Analysis of Multi-vitamin Tablets," by W. W. Hosler, vice-president in charge of production, Strong, Cobb & Co., Inc.; "Riboflavin in Pharmaceuticals," by Dr. John C. Bird, technical director, Vitamins Plus; "The Laxative Action of Senna in Mice, III. Comparative Strength of the Leaves, Pods, Stems and Roots of Domestic Tinnevelly Senna, with some observations on Cassia Obovata," by Dr. Irvine W. Grote and Maribelle Woods, The Chattanooga Medicine Co.; "Laboratory Methods for Testing Fungicides Used in the Treatment of Epidermophytosis" by Dr. George F. Reddish Lambert Pharmacal Co.; "Recent Chemotherapeutic Advances" by Dr. C. R. Addinall, Merck & Co., Inc.; "The Supply of the Rarer Alkaloids and Related Plant Principles," by Dr. Thomas Lewis, S. B. Penick & Co.; "Statistical Methods IX 't' Test," by Dr. James C. Munch, Upper Darby, Pa.

A round-table discussion of the papers was led by Dr. F. J. Cullen, executive vice-president of the Proprietary Association.

N.W.D.A. Chairmen

Lace I. Fitschen, newly elected president of the National Wholesale Druggists' Association, has announced the appointment of committee chairmen to serve the association during 1943 and 1944.

The new appointments are: Herman Brooks, Coty, Inc., entertainment; Earl Retter, Eli Lilly & Co., Indianapolis, business program; W. E. Powell, the B. F. Goodrich Co., Akron, associate membership; J. J. Toohy, E. R. Squibb & Sons, manufacturers; R. B. Rucker, McKesson & Robbins, Inc., Los Angeles, employer and employee relations; James B. Bowers, Owens & Minor Drug Co., Richmond, legislation; Henry B. Fairchild, Hazeltine & Perkins Drug Co., Grand Rapids, local associations; O. L. Rafuse, McKesson & Robbins, Inc., Buffalo, N. Y., trade promotion.

Also appointed were: J. E. Murphy, manager of the Providence division, McKesson & Robbins, Inc., credits and collection; and J. D. Slater, manager and merchandising manager, Van Vleet-Ellis division, McKesson & Robbins, Jackson, Miss., sales management.

Reappointed were: Harold M. Altshul, Ketchum & Co., New York, distribution of proprietaries; J. A. Robinson, McKesson & Robbins, Inc., New York, insurance; William S. Auchincloss, Oil, Paint & Drug Reporter, New York, memorials; Robert B. Magnus, Magnus, Mabee & Reynard, New York, rates and routes; and H. W. Adkins, executive vice-president of Yahr-Lang, Inc., Milwaukee, statistical research committee.

Companies

McKee Joins Pepsodent

Charles Luckman, president of The Pepsodent Co., Chicago, has announced that Walter McKee is joining the company as a vice-president. Mr. McKee was formerly sales manager of the toilet article department of Colgate-Palmolive-Peet Co., Jersey City, N. J.

WALTER McKEE

Centflor Company Formed

W. O. Bruell, J. Boninger and Dr. A. Beller have announced the formation of Centflor Manufacturing Co. with offices and laboratories at 6 Varick st., New York 13. The telephone number is Walker 5-6193.

Emfo Corp. Moves Office

The Emfo Corp. has moved its executive office to Room 1307, 404 Fourth ave., New York 16. The telephones are: Caledonia 5-5167, 6168.

AROMATICS

SYNTHETIC

Products of a Continuous Research Program Spanning 50 Years

DOW

CHEMICALS INDISPENSABLE
TO INDUSTRY AND VICTORY

Surprise Party to P. C. Magnus

A surprise birthday party was given to Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., on his fiftieth birthday, October 21. George H. McGlynn, M M & R treasurer, presided at a dinner held in the Jansen suite of the Waldorf-Astoria, and Bill Fischer, on behalf of the group, presented Mr. Magnus with a set of traveling bags.

Walker Heads Merck Club

S. Wylie Walker of Westfield, N. J., was elected president of the Quarter Century Club of Merck & Co., Inc., Rahway, N. J., at the annual dinner on November 15, held at the Elks Club in Elizabeth. The Merck Quarter Century Club is composed of 180 members who have been in the employ of the company for twenty-five years or more. The meeting was addressed by George W. Merck, president of the company.

Charlotte J. Schubert of Rahway was elected vice-president of the club and Walter L. Wilson of Rahway was elected secretary-treasurer. The executive committee elected for the new year consists of Arthur D. Walsh of New Brunswick, chairman; A. Fred Hope, John A. Machon, Mary E. Hornby and Ethan Lauer, all of Rahway.

The retiring president Dr. William H. Engels, presided at the meeting.

Casey Returns to Kurlash

P. R. Casey, head of the cosmetics and toiletry unit, Chemicals and Drugs Branch, Office of Price Administration, has resigned and will resume his duties as vice-president of the Kurlash Co., New York and Rochester.

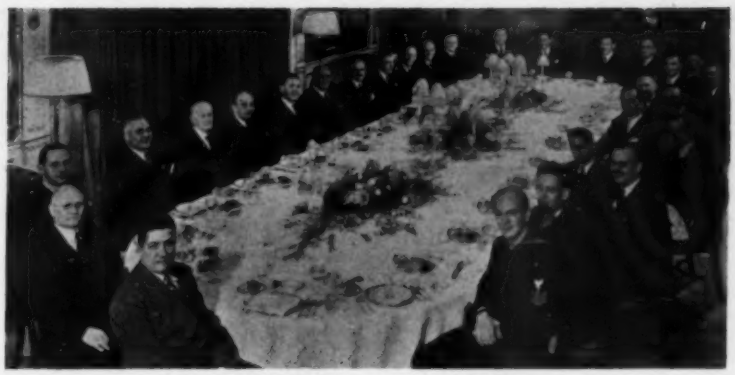
Robert Deupree, who has been with OPA for some time handling drugs, will succeed Mr. Casey and will now deal with both drugs and cosmetics.

Lucille Whisnant Joins Ritz

Lucille Whisnant, formerly vice-president in charge of sales for Tourneur, has joined Charles of the Ritz in an executive capacity. Miss Whisnant has been with Tourneur since its inception sixteen years ago and traveled for the firm both here and abroad.

Virginia Gates Resigns

Virginia Gates has resigned as advertising manager of Mary Dunhill, New York. Her future plans have not been announced.



DINNER TO P. C. MAGNUS

Upjohn Elevates Officers

The board of directors of The Upjohn Co., Kalamazoo, Mich., at a special meeting held November 15, voted to create three new vice-presidents and one new director in addition to other promotions.

Dr. L. N. Upjohn, president of the company since 1930, was elevated to the chairmanship of the board of directors. Donald S. Gilmore, vice-president of the company since 1936, and also its general manager, was elected president. Dr. E. Gifford Upjohn, medical director, Dr. Harold S. Adams, general superintendent, and C. V. Patterson, a general sales manager, were elected to vice-presidencies. Mr. Patterson was also elected to the board of directors. Dr. E. Gifford Upjohn and Dr. Adams were already members of the directorate.

At the same meeting the board named Emil H. Schellack, who with Mr. Patterson has been a general sales manager, the general sales manager of the company. Other officers of the company are John S. McColl, vice-president and treasurer; Dr. F. W. Heyl, vice-president and director of research; and J. B. Vanderberg, secretary.

Dr. L. N. Upjohn has been with the company since 1904, and was for twenty-five years head of the New York office. In 1930 he was elected president and took over the actual work of the office when he returned to Kalamazoo in 1931, when Dr. W. E. Upjohn, president and founder of the company, assumed the post of chairman of the board.

Mr. Gilmore joined the company in 1930 and in 1936 was made vice-president and later general manager, retaining his position of vice-president.

Mr. Patterson and Mr. Schellack both came to the company from Missouri, the former in 1925 as a salesman, and the latter in the same capacity in 1923. In 1931 Mr. Patterson came to Kalamazoo as secretary to the late Malcolm Galbraith, director of sales. Mr. Schellack came to the city in 1923 as Kalamazoo branch sales manager. In 1942 upon the death of Mr. Galbraith, the two men took over a joint office as general sales managers.

Enid Edson Joins Hudnut

Enid Edson, who for the past ten years has been associated with Shulton, Inc., has joined the staff of Richard Hudnut as director of packaging, bringing with her a background of original package design in a number of fields. After training at both the New England School of Design and the Rhode Island School of Design, Mrs. Edson began a promising career in industrial design which included stationery, paper, bedspreads, and packaging design.

Schering Wins Mail Award

For the third successive year, Schering Corp. has been selected as a direct mail leader by the Direct Mail Advertising Association. Again at the Annual Exposition of Advertising Printing held under the auspices of the New York Employing Printers Association, an unusually large number of Schering mailing pieces was selected for exhibition on the basis of excellence in design, typography, printing and advertising value.

Wilde Quits Guerlain

J. P. Wilde has resigned as vice-president and sales manager of Guerlain, Inc., New York. Mr. Wilde had been connected with Guerlain for the past seventeen years. John Paul Locher, who has been with the firm for more than eighteen years, is now in charge at the New York office.

Dr. Goodhue Entertained at Dinner

Dr. Lyle D. Goodhue, chemist for the Bureau of Entomology and Plant Quarantine of the Department of Agriculture, was entertained at dinner by S. B. Penick & Co., following his address on "War on Mosquitoes," at the *New York Herald Tribune* forum on current events.

Speaking before the forum, Dr. Goodhue, described the part played by mosquitoes in the transmission of malaria and other diseases and discussed the aerosol method of combatting them.

DINNER TO DR. GOODHUE

Solinsky Quits WPB

Robert S. Solinsky, who has been with the War Production Board since the early days of the Containers Division, has resigned as chief of the Metal Can & Tube Section.

Mr. Solinsky is president of Cans, Inc., Chicago, and has been connected with the can industry for over thirty-five years. He started his career with the American Can Co., has served as district sales manager with the Continental Can Co. in Chicago, central sales manager for that company, and assistant vice-president of National Can Corp.

Whittaker Joins Arden

Harris Whittaker for many years with Bourjois and more recently withRichard Hudnut has joined Elizabeth Arden as assistant to the president.

Sands—Hudnut P.A.

G. W. Sands has joined Richard Hudnut as purchasing agent. For the past two and a half years he was with Elizabeth Arden in the same capacity and for five years before that he was with Pinaud.

J. & J. Grant to Research Council

Johnson & Johnson Research Foundation of New Brunswick, N. J., has made a grant of $75,000 to the National Research Council for the collection of medical reports and records, widely dealing with military medical practice, civilian practice as affected by the war, medical education and research and the distribution of diseases. This material, so far as military necessities permit, will be made available by publications, summaries and notes.

Major General James Carre Magee, Medical Corps, United States Army, retired, has been named executive officer of this new information service of the division of medical sciences of the National Research Council.

Scott—Searle Ad Director

The appointment of John L. Scott as director of advertising of G. D. Searle & Co., Chicago, has been announced by John G. Searle, president of the company.

Mr. Scott who assumed his new duties in November, has had twenty years of experience in the advertising and publishing fields. For many years he was managing editor of the Dartnell Publications and more recently has been general manager of Whitlock & Co., publishers' representative. He also has been an instructor in advertising at Drake University, Des Moines, and at Central Y.M.C.A. College and Northwestern University in Chicago.

JOHN L. SCOTT

Collyer—Calco Ad Manager

Robert Collyer has been appointed advertising manager of the Calco Chemical Division of American Cyanamid Co., Bound Brook, N. J.

Air Express to Cuba

Chas. L. Huisking & Co., Inc., New York, agent in New York for Drogueria de Johnson, Havana, Cuba, is advising the trade of a new daily air express service from Miami, Fla., to Havana. It is the Expreso Aereo Inter-Americano S. A., of which Dr. Theodore Johnson, the head of the drug house in Havana, is president, and the new system is providing an efficient fast service to that market.

Shipments from New York for this service are handled by Acme Overseas Express Division of Acme Fast Freight, Inc.

Lemke Issues Price List

B. L. Lemke Co., manufacturing chemist and distributor of fine and rare chemicals, has issued a new wholesale price list (No. 55) covering pharmaceutical chemicals and specialties which is available upon request. A new price list on laboratory and research chemicals will be ready for distribution early in December.

National Wax Folders

As a supplement to its catalog of natural and synthetic waxes, National Wax Refining Co., Brooklyn, N. Y., has published two new folders. One of them deals with Ozokerite, lists its uses, advantages and specifications. The other gives the specifications of "B" Wax, a synthetic beeswax, and Wax No. 1001, a synthetic carnauba. Copies of the folders are available upon request.

Bourjois Sends Cigarettes

Bourjois, Inc., New York, has made arrangements to send to our armed forces serving in the foreign theatres of war, two million Camel cigarettes.

. . . with them marches *measured purity*

Over strange roads . . . and on familiar streets . . . they move. Men in the armed services. Civilians in home defense.

With them goes *advance* protection.

It comes from the pharmaceutical laboratories of the nation. Hundreds of products—from foot powders that relieve aching feet to preparations that fight infections—make these marching men and women healthier, stronger, more fit for today's emergencies.

And behind these products is still another factor.

It is the fine chemical.

Often, the effectiveness of a product is assured by the purity of the fine chemicals which are its component parts.

At Baker . . . it's *measured purity* in fine chemicals . . . purity to predetermined, exacting standards.

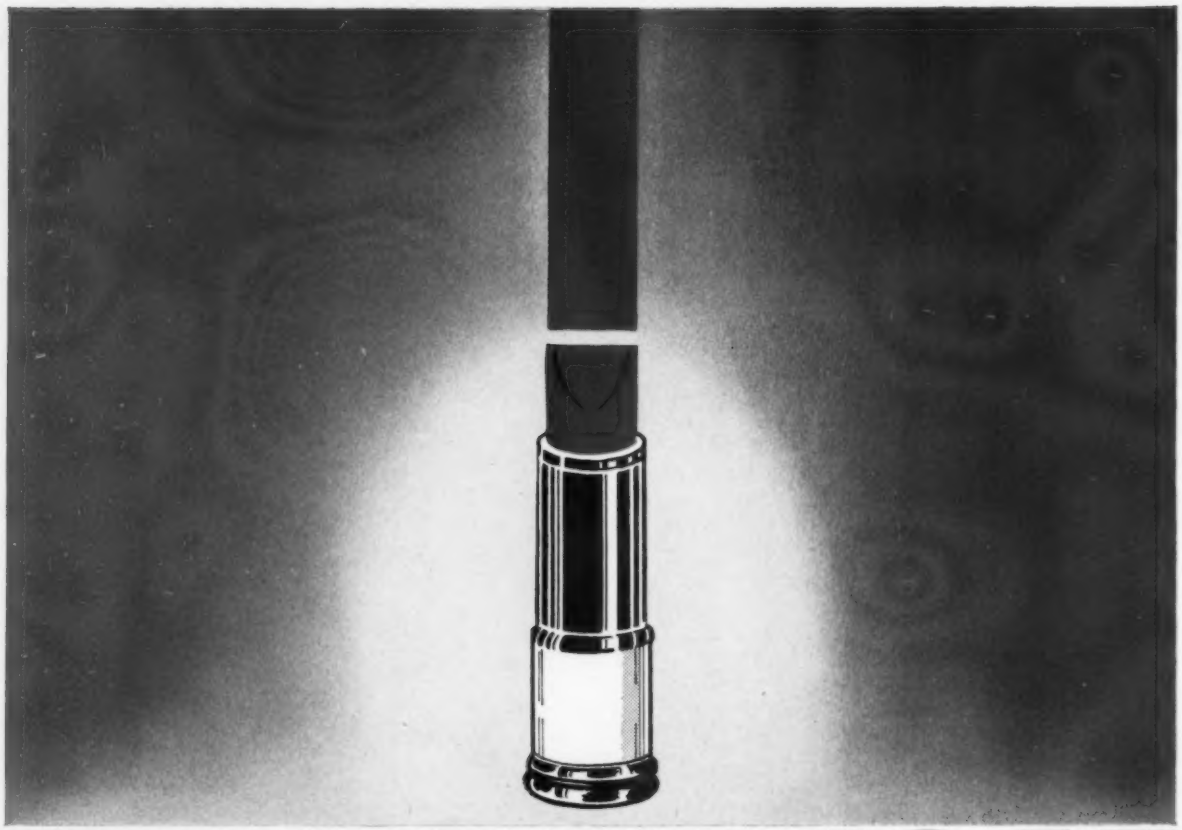
Leading pharmaceutical manufacturers appreciate Baker's fundamental principle—"there shall be no compromise with quality."

If you buy fine chemicals or have a fine chemicals problem that requires exacting, measured purity, write us. Perhaps we can help you, too!

J. T. Baker Chemical Co., ***Executive Offices and Plant:*** **Phillipsburg, N. J.**
Branch Offices: **New York, Philadelphia and Chicago.**

Baker's

Baker's fine chemicals



HELFRICH

HEADQUARTERS FOR
ONE OR A COMPLETE LINE OF
QUALITY TIME TESTED
PRIVATE LABEL COSMETICS

Under the difficulties of present operating conditions we are doing everything possible to make prompt deliveries and at the same time maintain the highest quality and fair prices that have made HELFRICH a top ranking name in the private label industry.

WHAT HELFRICH PROMISES . . . . HELFRICH DOES

All inquiries and correspondence west of the Rocky Mountains should be addressed to our Chicago plant.

HELFRICH

HELFRICH

Sends its Customers, Potential Customers Suppliers and Friends

Sincere Christmas Greetings

★

E. L. HOUSTON, vice-pres. and genl. mgr. Helfrich Labs. of Canada, Ltd.

DOYLE E. CARPENTER, A.B. M.S. chief chemist. Hdqts. Chicago plant.

JAMES STOCKS, production manager Chicago plant.

HAROLD SENN, production manager New York plant.

SALLY GORDON, accounting, New York and Chicago companies.

MATILDA BRENDELL, asst. to G. H. Heidbreder in New York.

THESE ARE THE KEY CO-WORKERS WHO MAKE POSSIBLE THE QUALITY AND SERVICE THAT GUARANTEE THE HELFRICH REPUTATION OF . . .

WHAT HELFRICH PROMISES . . HELFRICH DOES

MAXINE EBERSOLD, asst. to G. H. Heidbreder in Chicago.

GRANT H. HEIDBREDER, vice-pres. and general manager New York and Chicago companies.

Laboratories

- HELFRICH LABORATORIES, INC., 564-570 WEST MONROE STREET, CHICAGO
- HELFRICH LABORATORIES OF N. Y., INC., 151-163 WEST 26TH ST., NEW YORK
- HELFRICH LABORATORIES OF CANADA, LTD., 690 KING ST., WEST, TORONTO, ONT.
- CABLE ADDRESS: HELFLABS, NEW YORK .... CHICAGO .. TORONTO

There is no "Synthetic" for

EXPERIENCE!

Developing with the growth and the progress of the industry the past few decades, the A. C. Drury organization has been a prime factor in the distribution of raw materials and essential oils for the cosmetic, perfume and soap trades.

It is natural that we know what manufacturers in our industrial scope need and can use.

★

Gums and Vanillas
For 85 years
THURSTON & BRAIDICH
NEW YORK
Specialties
Gum Arabic—Gum Karaya—
Gum Tragacanth—Vanilla
Beans—Tonka Beans.

★

Talc
Oldest and largest in U.S.A.
SIERRA TALC CO.
LOS ANGELES, CALIF.
Sierra Talcs approximate the ideal—chemically and physically—and excel in uniformity of milling and color.

★

LACO Castile Soap
Made with 100% Pure Imported Olive Oil
LACO PRODUCTS, INC.
BOSTON • NEW YORK
Manufacturers and Importers
Castile Soap U.S.P. "Laco"
Powdered—"Purls"—Bars

★

Likewise, over the years we have enjoyed the best and most reliable connections both in America and abroad and have acquired an intricate knowledge of where to secure these materials and specialties, which is valuable to our customers, particularly in the present uncertain market.

That we have been successful in our operations is due largely to the fact that many of our customers regard us as a part of their organization. They give us their confidence—tell us their problems and just what item or items they lack, etc.

In fact, some regard us as their special purchasing agent. We welcome that relationship. It puts us to a test and results have been many times mutually helpful and profitable. Those we serve know this. Perhaps we may be able to serve you.

Precipitated Chalk
Sturge's "Sturgeon Brand" leads the world
H. J. BAKER AND BRO.
NEW YORK
Sturge's English precipitated chalk
U.S.P. Extra light—Dense.

★

Bees-Wax
Since 1852
THEODOR LEONHARD WAX CO.
Established 1852
HALEDON, PATERSON, N. J.
Bleachers, & Refiners of Bees-Wax.
White Bleached Bees-Wax
T. L. Brand. Extra Quality—
U.S.P. and 100% pure.

★

Stearic Acid
Superiority founded on performance
THE HARKNESS & COWING CO.
CINCINNATI, OHIO
Manufacturers of Stearic Acid
Saponification Process.

★

Medicinal White Oils
Qualities Unsurpassed
THE ATLANTIC REFINING CO.
PHILADELPHIA, PA.
260 South Broad St.
Petroleum Products
White Mineral Oils U.S.P. for pharmaceutical and cosmetic uses.
All gravities, all viscosities.

★

A. C. DRURY & CO., INC.

219 EAST NORTH WATER STREET • CHICAGO, ILLINOIS

NEW JERSEY MACHINE CORP. 25th ANNIVERSARY PARTY

N. J. Machine 25th Anniversary

A booklet commemorating its 25th anniversary has been published by New Jersey Machine Corp., Hoboken, N. J.

To mark the milestone the anniversary was highlighted by a dinner to all employees at the Swiss Town House, Union City, N. J. Carl H. Lambelet, president of the company, presented to four employees who had been with the corporation twenty-five years, an emblem in the form of the NJM monogram, set upon a gear having twenty-five teeth, with the numeral 25 appended to it. The four men honored were Harold Burns, Gustav Wigert, Stephen Marion, and Robert Mittricker. They were also presented with gold watches suitably inscribed and were the honor guests at the dinner. Mr. Wigert is shop superintendent, Mr. Burns, machine shop foreman, and Mr. Mittricker has been manager of the Chicago office for a number of years.

Perfumes from Cuba

Bienvenido Fernandez, Bernaza No. 113, Habana, Cuba, who has been manufacturing perfumes for over twelve years, is at present exporting colognes, toilet waters and lotions made with high proof alcohol. Mr. Fernandez is interested in making a connection with some American companies which need products of this kind.

Tysdal Represents Goldschmidt

Goldschmidt Chemical Corp., New York, has announced that E. M. Tysdal has returned to his post as its sales representative in the midwest with headquarters at 325 West Huron st., Chicago.

Adams, Morgan & Cornell Formed

Adams, Morgan & Cornell, Inc., has been established for the manufacture of organic chemicals including pharmaceuticals. The company maintains executive offices at 7 Dey st., New York, and a plant at 1245 39th st., Brooklyn. Franklin M. Cornell, Ph.D. is president, and Karl Adams, Jr., is treasurer.

Norwich Fellowships

The Norwich Pharmacal Co. has established two fellowships at Syracuse University beginning September 1, 1943. The total of the grant is $2500 for work on antibacterial agents under the direction of Dr. P. M. Ruoff. The fellowships have been awarded to R. D. Sprenger, M.S. and F. W. Staab, M.S.

Pfizer to Use Penicillin Process

Chas. Pfizer & Co., Brooklyn, has signed a contract with the National Research Corp. of Boston for the use of its new high vacuum diffusion process for the production of penicillin. The process cuts to six hours the drying time which heretofore has taken twenty to forty hours, and reduces the cost to one-sixth that of any other method.

Dehydration which is essential in the production of penicillin is achieved through a high vacuum of 1/10,000ths of an atmosphere or better which is created by mechanical pumps and diffusion pumps of tremendous capacities. National Research Corp. has made the process available royalty-free for production of penicillin in government-sponsored plants.

American Home Buys Diamond Dyes

American Home Products Corp., through its wholly owned subsidiary, the A. S. Boyle Co., Inc., has purchased Diamond Dyes which was formerly owned by the Sterling Drug, Inc.

This is the eighth company acquired by American Home Products Corp. this year. S. Schraffenberger, president of the A. S. Boyle Co., Inc., stated that the purchase was made "because its line of fifty-three colors and tints are distributed through the same types of outlets that buy our items. These include Black Flag, Three-In-One- oil, and the Old English waxes."

Diamond Dyes will continue under the management of C. H. Kendall, plant manager, and F. L. Prescott, textile chemist, and the present personnel will be retailed. The purchase does not include the Diamond Dyes Canadian subsidiary.

Willard Joins Arden

C. A. Willard, deputy chief of the Drugs and Cosmetics Section of the Chemicals Division, War Production Board, has resigned to become comptroller of Elizabeth Arden, New York.

Mr. Willard has been with the government since December 12, 1941, soon after the organization of the Health Supplies Branch of the old Office of Production Management. When the branch was divided, Mr. Willard became chief of the Toiletries and Cosmetics Branch and then, when the drugs and cosmetics sections were consolidated in a single section, he became deputy chief of the Drugs and Cosmetics Section.

E. B. Tysdal, who has been chief of the cosmetics unit for the past year will succeed Mr. Willard.

POWCO BRAND
REG. U.S. PAT. OFF.

NEUTRAL SOAP

Our modern production methods and close selling margin make it possible for you to buy standardized, air floated POWCO BRAND Neutral Soap of *better quality—at a saving.*

POWCO BRAND soap is *laboratory controlled* to maintain rigid uniformity of physical and chemical properties so that, once you adopt POWCO BRAND soap, your base does not vary. That's why chemists like it.

We urge you to consider carefully POWCO BRAND—for better quality at a saving.

Tested Quince Seed : Powdered Neutral Soap

JOHN POWELL & CO.
112 East 32nd Street,
New York City.

COLOR RIGHT
TEXTURE RIGHT

BEAUTIFUL women choose the facial cream with the finest texture and the purest color. Facial cream made with a Beehive Brand Beeswax base has a better chance to meet these requirements.

Beehive Brand Beeswax is 100% pure, it is uniform in texture and perfectly white. Our buyers select it from the finest grade of crude beeswax. It is then tested for purity, quality and uniformity in our own laboratories, and bleached by the sun and air.

Uniformity of Beehive Brand Beeswax will keep your product always up to the high standard you set for it. The quality and uniformity never change. It is entirely free from adulterants and imperfections of any kind. And back of every tablet of Beehive Brand Beeswax stands the reputation of the manufacturer.

WRITE DEPT. D-12 TODAY FOR COMPLETE INFORMATION

BEEHIVE BRAND
Beeswax
WILL & BAUMER CANDLE CO., INC.
Established 1855
Buckley Road, Syracuse, New York

W. L. McManus on Crown Board

Walter L. McManus in charge of the metallic link plant of Crown Cork & Seal Co., Inc., has been elected a member of the board of directors. He is the son of Charles E. McManus, president of the company.

After his graduation from Georgetown University, Mr. McManus went to work in Crown's Guilford machine shop. Later he made an extensive tour of South America in order to obtain firsthand knowledge of the company's export business. He returned to the machine shop and then moved on to the engineering and plane assembly plants.

Hutchins Joins Hillman's Magazines

Harold Hutchins, executive editor of American Druggist for the past twelve years, has resigned to become advertising manager of the Hillman Women's Group. Mr. Hutchins started out as a retail druggist in Philadelphia and later joined the sales department of a pharmaceutical manufacturer. He next joined the advertising department of the Druggists Circular and went from there to the national advertising department of the Scripps Howard newspapers.

He was educated at East Stroudsburg State Teachers College, Carnegie Institute of Technology and the Philadelphia College of Pharmacy and Science.

Wheelco Changes

R. A. Schoenfeld, vice-president and sales manager of Wheelco Instruments Co., Chicago, has announced several recent additions to the company's sales and service organization.

Cochrane Steam Specialty Co., Boston, has been appointed to serve with George W. Hall, the company's present representative, in Massachusetts, Rhode Island, Maine, New Hampshire, Vermont and parts of Connecticut east of the Connecticut river.

C. L. Clark, formerly attached to the company's Cleveland office, has been placed in charge of a western New York office in Buffalo. Charles D. Mount has been named sales and service representative for southern Ohio and northern Kentucky, making his headquarters in Cincinnati, while H. E. Holling has been appointed northwestern Illinois representative with headquarters in Peoria.

The Lang Co., Salt Lake City, has been appointed sales and service representative in Utah, Idaho, Wyoming and Nevada.

Weil Names Miss Fink Credit Mgr.

Muriel J. Fink, who has been associated with Parfums Weil Paris Co.,

MURIEL FINK

New York, since the organization of the company, has been made credit manager it has been announced by Francois Nazare.

McKesson Advances Hawes

Peyton Hawes, vice-president of McKesson & Robbins, Inc., has been appointed manager of the Portland, Ore., Division, it has been announced by James H. Parks, regional vice-president, San Francisco. Mr. Hawes succeeds the late Harlan E. Brown who died suddenly November 5 at his home in Beaverton, Ore.

Mr. Hawes first became associated with McKesson in the Spokane, Wash., division in 1925, and he has served as merchandising manager in Portland since 1929. A native of Los Angeles, he was graduated from Dartmouth College in 1923.

McKesson Coast Meetings

A series of three meetings have been held by Pacific coast officials of McKesson & Robbins, Inc., under the supervision of James H. Parks, regional vice-president, San Francisco. I. H. Bander, vice-president in charge of drug and sundry sales, left New York November 8 to be gone for six weeks. Mr. Bander planned to make a complete circuit of the western area, beginning at Chicago. W. E. Dewell, vice-president in charge of the manufacturing division, Bridgeport, departed November 10 to participate in the meetings, the first of which was at Portland, Ore., November 19 and 20.

November 26 and 27 a meeting was held at San Francisco and the third meeting was at Los Angeles.

Hairdresser Contest

A nationwide contest among hairdressers is being sponsored by the Venida League in conjunction with the Rieser Co., maker of Venida hair-nets, liquid lacquer and other beauty products for the hair. Prizes in the form of war bonds will be awarded to the hairdresser designing the best coiffures for women in the armed services; for the defense plant worker; and for the volunteer civilian worker. Three prizes will be awarded in each category and the judges will be a group of newspaper and magazine beauty editors.

Wightman Buys Building

Geo. E. Wightman Co., Portland, Ore., has purchased a building 100 x 100 located at 3233 North Williams ave., that city. This gives the company 18,000 square feet of room for its new factory and laboratory.

The company, which was founded thirty-three years ago, now makes a thousand different products including insecticides, disinfectants, cleansers, all kinds of polishes, potash soaps, and a great number of cosmetics. For the past fifteen years it has not employed a salesman.

Health Insurance for Pinaud

Pinaud, Inc., New York, has enrolled its entire staff in the medical and surgical care plan of Group Health Cooperative, a non-profit health insurance corporation which provides protection to employee, union, fraternal and cooperative groups in southern New York State.

The entire premium for each employee will be paid by Pinaud, Inc., and premiums for employee dependents will be paid through payroll deduction.

Monsanto Names Wright

J. Handly Wright of Birmingham, Ala., has been appointed director of the Department of Industrial and Public Relations of Monsanto Chemical Co., it has been announced by Charles Belknap, president.

For the past four and one-half years Mr. Wright has served as executive vice-president of Associated Industries of Alabama. In the new position with Monsanto he will have charge of advertising, public relations, industrial and labor relations, safety program, and company publications.

Mr. Wright is a native of Nashville and attended Vanderbilt University. Prior to his connection with Associated

Which Rose is **RIGHT?**

Why does one lipstick sell on sight while another warms the shelf? They start only a shade apart, yet they finish on opposite ends of the sales sheet. The difference is mostly a matter of subtle color selection.

To assist you in developing exactly the right color, National offers three-way help: (1) The cosmetic industry's most complete line of U. S. Government Certified Colors with which to work, (2) unequalled uniformity of shade and strength, and (3) the composite experience of National technicians.

We invite you to use nearby National Technical Service for color matches and formulas.

Pharmaceutical Laboratories

NATIONAL ANILINE DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET NEW YORK, N. Y.

BOSTON PHILADELPHIA GREENSBORO CHATTANOOGA
PROVIDENCE SAN FRANCISCO ATLANTA PORTLAND, ORE.
CHICAGO CHARLOTTE NEW ORLEANS TORONTO

Calco

Announces General Availability of SULFADIAZINE

After 2 years of mounting production capacity to meet the heavy requirements of the armed services, CALCO is now in a position for the first time to offer SULFADIAZINE generally to ethical drug manufacturers.

In making this announcement of SULFADIAZINE'S availability, CALCO wishes to remind pharmaceutical manufacturers of the rigid standards of quality control that safeguard all CALCO Pharmaceuticals from laboratory throughout every step of quantity production . . . a control that assures the uniform excellence of every product bearing the famous CALCO name.

OTHER AVAILABLE CALCO PRODUCTS

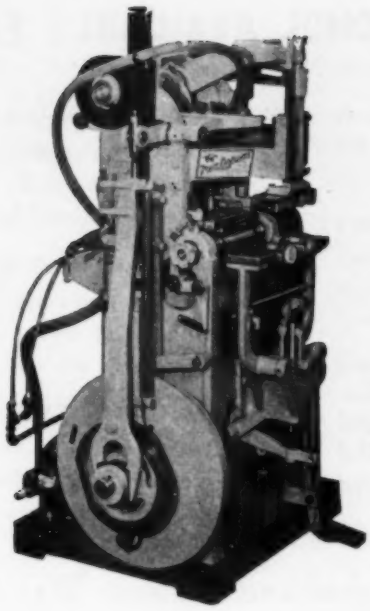
Sulfapyridine U.S.P. (and Sodium Monohydrate)
Sulfathiazole U.S.P. (and Sodium Monohydrate)
Nicotinamide U.S.P.
Mandelic Acid U.S.P.
Nikethamide
Methylene Blue U.S.P. (Powder—Crystals)
Sulfanilamide U.S.P.
Cinchophen N.F.
Calcium Mandelate U.S.P.
Neocinchophen U.S.P.
Glutamic Acid HCL
Calcium and Sodium Pantothenate
2-Methyl-1,4 Naphthoquinone
Phenothiazine (For Veterinarian Use)

Certified Colors for Pharmaceutical and Cosmetic Use

Pharmaceutical Department

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY

BOUND BROOK NEW JERSEY



A-1-K
(or better)

This Machine helps in METAL SAVING by lower cost of labeling GLASS-PACKS

FOODS
DRUGS

FOOD PACKERS AND DRUG MANUFACTURERS LIKE THE LABELRITE ADVANTAGES—

- **PERFECT REGISTER**
- **NO WIPING OF CONTAINERS**
- **"PETTY-CASH" CHANGE PARTS**
- **LEAST TIME FOR CHANGING**

Labelrites are being provided for manufacturers converting to "Glass-packs" on priorities of A-1-K or better. You don't need "skilled" operators to maintain a speed of 50 or more per minute.

Labelrites can be supplied for labeling 2-at-a-time, like the one shown above, on most sizes of jars.

Get FACTS*--and you'll get Labelrites!*

NEW JERSEY MACHINE CORPORATION

16th & Willow Avenue . . . Hoboken, N. J.

Chicago Office: 325 W. Huron Street

ISOPROPYL ALCOHOL AVAILABLE FOR:

SHAMPOOS: Isopropyl Alcohol aids in cleaning hair and scalp thoroughly and in leaving hair soft and lustrous.

HAIR AND SCALP PREPARATIONS: Isopropyl Alcohol as a vehicle for hair and scalp preparations aids the cleansing and antiseptic value of the tonics.

STERILIZING SOLUTIONS: 40% Isopropyl Alcohol will kill dried Bacillus Coli in ¼ minute. 50% Isopropyl Alcohol is equivalent to 70% ethyl alcohol for killing Bacillus streptococcus and staphlococcus.

BODY RUBS: Isopropyl Alcohol evaporates slowly, thereby prolonging the cooling effect when used in body rubs. Isopropyl Alcohol has no denaturants.

FACE AND HAND LOTIONS: Isopropyl Alcohol evaporates slowly, has little tendency to dry the skin, and aids in keeping the skin soft.

AFTER SHAVE LOTION: Isopropyl Alcohol is excellent for this product because it aids the after-cooling and skin-freshening qualities of the lotion.

Use 91% Isopropyl Alcohol and Release War Materials

STANDARD ALCOHOL COMPANY

26 BROADWAY NEW YORK, N. Y.

You can depend now as always on SHERWOOD'S consistently high quality and personalized attention to customer's requirements

SHERWOOD REFINING COMPANY, Inc.

The Refinery of Controlled Specialization

ENGLEWOOD, NEW JERSEY · Refinery: WARREN, PA.

Industries of Alabama, he was assistant director of public relations for the National Association of Manufacturers for four years. He was a partner in the public relations firm of Fred L. Palmer and J. Handly Wright from 1932 to 1935, and was a member of the staff of Ames & Norr, public relations agency in New York, from 1929 to 1932. Mr. Wright spent three years with the Associated Press and has worked on a number of newspapers.

Cronk—Com. Solvents Ad. Mgr.

Commercial Solvents Corp. has announced the appointment of John N. Cronk as advertising manager. He will be located in Terre Haute, Ind., and the advertising and promotional activities of the corporation will continue under the general supervision of the technical service division of which Charles D. Goodale is manager.

After his graduation from Colorado College, and post-graduate work at Denver University and the University of Colorado, Mr. Cronk became advertising manager of the Denver Equipment Co., a position which he occupied for the past fourteen years.

Mr. Cronk has been regional director of the mountain states area of the National Industrial Advertisers Association since 1941; and a director for members-at-large since 1943. He is a member of the Advertising Federation of America and the Direct Mail Advertisers Association.

Nicol in Charge United Drug Personnel

J. W. Dart, president of United Drug, Inc., has announced the election of Eric A. Nicol as vice-president in charge of personnel. Mr. Nicol was formerly chief of the Lend-Lease Mission to Australia, serving in that capacity from 1942 until his resignation early this year to join the staff of United Drug, Inc.

Prior to that he served the government in various capacities. In 1939 he was a member of the Administration Management Staff of the Executive Office of the President. Later he served as executive assistant to Sidney Hillman in the labor division of the War Production Board, and was responsible for the development of the manpower program in its early stages. He also served as civilian aide to the Secretary of War in the North American Aviation Co. during the period it was under government control, and was chairman of the committee appointed to deal with the displacement of 500,000 workers in the change from civilian to war production by the automotive industry.

Before entering government service, Mr. Nicol was personnel manager of the Western Union Telegraph Co., personnel and labor relations manager for the Philadelphia Gas Co., instructor of personnel management at Wharton School, University of Pennsylvania, and at present is a faculty member of the Princeton University Industrial Relations Conference.

People

S. B. Penick Jr. to Wed

S. B. Penick Jr., president of S. B. Penick & Co., New York, has become engaged to marry Miss Elizabeth Van Wie, Montclair, N. J.

Dinner to Charles L. Huisking

Charles L. Huisking was guest of honor at a dinner-dance given by the members, officers and governors of the Huntington Crescent Club, Huntington, L. I., December 4. Mr. Huisking was honored for his outstanding services to the club as its president.

Capt. Neuffer Awarded Silver Star

Captain Robert P. Neuffer, U. S. Marine Corps, has been awarded the Silver Star Medal for "conspicuous gallantry and intrepidity," thus making him one of the first members of the industry to be so distinguished. He left Lehn & Fink Products Corp. to enlist in the Marines in February, 1941. A graduate of Wesleyan College, he joined Lehn & Fink in January, 1940, going first to the factory in Bloomfield, N. J., and then to the New York office to work for Tussy Cosmetiques. At Tussy, he was assistant to Paul Carey, now also a Captain in the Marines, serving in the South Pacific area. After his enlistment he entered Officers' Training School at Quantico and in time reached Guadalcanal, where his leadership and bravery won him recognition.

The story of his achievement is told in the citation signed by Secretary of the Navy Frank Knox. On the night of October 8, 1942, the positions of the Marines along the Matanikau River were fiercely attacked by the enemy. Captain Neuffer withdrew his company, with the exception of one platoon cut off by the Japanese, and established a secondary defensive position in the darkness of the jungle, where they withstood the enemy assault for the remainder of the night. By so doing he was able to secure the right flank of the battalion and "hasten the eventual destruction of a stubborn and persistent foe."

Grandfather Joseph A. Huisking

Joseph A. Huisking, of Fritzsche Brothers, became a grandfather when a son, Douglas Vincent Reback, was born to Mr. Huisking's daughter, Mrs. Vincent Reback at Dayton, O., on November 17. Mr. Reback is a captain in the U. S. Army Air Force. The infant was christened at Dayton on December 11, with Mr. and Mrs. William D. Barry as the godparents.

Ahles Celebrates Wedding Anniversary

Harry Ahles, Chicago representative for Ungerer & Co., and John Powell & Co., recently celebrated his fortieth wedding anniversary.

McCormick Heads Salary Board

Charles P. McCormick, president of McCormick & Co., Baltimore, has been elected president of the Standard Salary Board of Maryland. Mr. McCormick has been a member of the board since it was formed and succeeds Walter D. Owens, who has become State Employment Commissioner.

Dr. Isherwood Heads British Assn.

Dr. Percy C. C. Isherwood, O.B.E., Ph.D., F.I.C., chairman and chief managing director of W. J. Bush & Co. Ltd., London, and president of W. J. Bush & Co. Inc., New York, has been appointed chairman of the Association of British Chemical Manufacturers.

Perkin Medal to Du Bois

Gaston F. DuBois, vice-president of Monsanto Chemical Co., St. Louis, has been selected by the American Section of the Society of Chemical Industry to receive the Perkin medal for outstanding work in applied chemistry. The presentation will be made January 7 at a dinner at the Hotel Commodore, New York.

Mr. DuBois was born in Switzerland in 1880 and attended the Federal Polytechnic in Zurich, from which he was graduated as a chemical engineer in

AMYL ACETATE
AMYL BUTYRATE
AMYL CAPROATE
AMYL FORMATE
AMYL VALERATE

. . . . . .

Five NORTHWESTERN Flavoring esters which have given satisfaction for more than half a century.

. . . . . .

THE NORTHWESTERN CHEMICAL COMPANY
THE LARGEST MAKERS OF BUTYRIC ETHER IN THE WORLD
WAUWATOSA, WIS.

RAW MATERIALS *for the* DRUG & COSMETIC INDUSTRY

TRY THIS SERVICE!
Let Us Mix
Your Private Formulas

LAMEPON K—A soapless and limestable detergent for Textiles, Soaps, Insecticides, Sanitary Cleaners, Laundry Products.

LAMEPON 4C—A foaming and wetting agent of slightly acid reaction for cosmetics.

For samples and information write to

WELCH, HOLME & CLARK CO., Inc.
563 GREENWICH STREET ESTABLISHED 1838 NEW YORK CITY

The Orange Oil With Freshest Flavor And Truest Aroma!

Orange Oil is *our* business, and EXCHANGE Brand is your assurance of matchless *flavor*, *freshness*, and *uniformity* — your benefit of over 20 years of our experience in satisfying the requirements of American users.

Ask our Jobbers for Samples

FRITZSCHE BROTHERS, INC.
76 Ninth Avenue, New York 11, N. Y.

DODGE & OLCOTT COMPANY.
180 Varick Street, New York 14, N. Y.

Distributors for: **CALIFORNIA FRUIT GROWERS EXCHANGE PRODUCTS DEPT., ONTARIO, CALIF.**

Producing Plant:
Exchange Orange Products Co., Ontario, California

Copyright 1943, California Fruit Growers Exchange, Products Dept.

Exchange
OIL OF
ORANGE
U. S. P.

As white and bright as ever!

JUST LIKE PAINTING A HOUSE. *Coated* Lithwite, with its surface mineral coating, gives you just the white you want.

Despite the shortage of critical wood pulps which necessitate the use of pulps of darker and poorer quality, you can still get folding cartons as white and bright as ever with *Coated* Lithwite

AS YOU KNOW, many high-grade paperboards *have* been affected by war conditions. But not *Coated* Lithwite. Its original whiteness and brightness, its brilliant printability, its unusual folding and sealing qualities have been maintained. And the reason: *the surface coating of this revolutionary paperboard is compounded of noncritical materials!*

All of this should be good news to carton buyers. For this genuine *mineral*-coated board enables you to give your packages the advantage of better appearance and—because there have been fewer problems in the production of *Coated* Lithwite than in some other high-grade paperboards—limited quantities of *Coated* Lithwite cartons are available from time to time.

Write. We will send you printed samples so you can compare the striking qualities of *Coated* Lithwite with your present cartons. Better still. Send along detailed specifications and a sample of your present carton and we will submit a quotation so you can also make a down-to-the-penny cost comparison with the cartons you are now using.

FINER PRINTING. *Coated* Lithwite's surface is so uniform and hard, so free from "chalkiness," that inks stand up brilliantly, halftones and type print crisply—without fill-up.

BETTER PERFORMANCE. *Coated* Lithwite bends, scores and folds without shattering. Takes a tight seal—and is not temperamental about the type of glue used.

The GARDNER-RICHARDSON Co.

Manufacturers of Folding Cartons and Boxboard • MIDDLETOWN, OHIO

Sales Representatives in Principal Cities: PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • NEW YORK • BOSTON • PITTSBURGH • DETROIT

1903. He then attended the Technische Hochschule in Dresden where he specialized in electrochemistry.

On a visit to America in 1904, he was offered a position with Monsanto by the late John F. Queeny, president and founder of the company. Since that time Mr. DuBois has contributed to practically every technical development of the company and its subsidiaries.

Sappenfield in Controllers' Institute

R. G. Sappenfield, president and treasurer of The Campana Corp., Batavia, Ill., has been elected to membership in the Controllers Institute of America, a technical and professional organization of controllers devoted to improvement of controllership procedure.

Financial

Amer. Cyanamid Net Higher

American Cyanamid Co. and subsidiaries report for the first nine months of this year a net profit of $5,048,475 after providing $750,000 for contingencies and $14,910,358 for federal and foreign taxes on income. This is equivalent to $1.73 a share and compares with a net income of $3,733,629, or $1.27 a share, after deducting $750,000 for contingencies and $10,154,394 for taxes.

Squibb Earns More

E. R. Squibb & Sons and domestic and Canadian subsidiaries report for the September quarter a net profit, after $1,003,258 taxes, of $546,241, equal to $1.05 a share and comparing with a revised net of $471,628, or 94 cents a share, earned in the September quarter last year when the provision for taxes was $492,710.

Sterling Drug Earnings Up

Sterling Drug Inc. and subsidiary companies report for the nine months ended September 30 a net income of $5,654,593, after provision of $7,136,569 for income and excess profits taxes. This is equal to $3.23 a share and compares with net earnings of $5,077,087, or $2.90 a share earned in the first nine months of 1942 when the provision for taxes was $6,750,495.

For the quarter ending with September the earnings were $1,720,382, or 98 cents a share, after tax provision of $1,844,979. In the third quarter of 1942 the earnings were $1,580,985, or 90 cents a share, after taxes of $2,100,695.

Vick Earnings Off

Vick Chemical Co. and subsidiaries report for the September quarter net earnings, after $1,905,003 provision for taxes, of $1,262,574, or approximately $1.85 a share. This compares with $1,335,689, or $1.96 a share, after $1,198,665 taxes, for the September quarter last year.

Walgreen Earnings Steady

Walgreen Co. and subsidiaries report for the year to September 30 a net profit, after $6,045,000 Federal taxes after $500,000 post-war credit, and after $500,000 reserve for post-war contingencies, of $3,269,519, equal to $2.20 a share. This compares with a net of $3,361,469, or $2.27 a share for the previous fiscal year when the provision for taxes was $3,125,000.

Obituaries

Harold S. Adams

Dr. Harold Stanard Adams, vice-president, plant manager and a director of the Upjohn Co., died December 4 of a heart attack at his home in Kalamazoo. He was fifty-seven years old.

Dr. Adams was born in Pittsfield, Mass., and after his graduation from Williams College in 1911, where he was elected to Phi Beta Kappa, he received an M. A. degree from Amherst College and a Ph. D. in chemistry from the University of Chicago. He was formerly with E. R. Squibb & Sons at New Brunswick, N. J., and the United States Rubber Co. at Naugatuck, Conn. He joined the Upjohn Co. in 1926 and had been general superintendent and a director of the company until his recent election to a vice-presidency.

Dr. Adams was a director of the American Drug Society, Past Commodore of Kalamazoo's Gull Lake Yacht Club and president of the Torch Club of Chemists.

H. V. Arny

Dr. Henry Vinecome Arny, who retired as dean of the Columbia University College of Pharmacy in 1937, died at his home in Montclair, N. J., November 3. He was seventy-five years old.

He was graduated from the Philadelphia College of Pharmacy in 1889 and worked in a drug store in New Orleans until 1892 when he went to Germany where he obtained degrees from the University of Berlin and the University of Gottingen.

Upon his return to this country in 1897 Dr. Arny became professor of pharmacy and dean of the College of Pharmacy at Western Reserve University, Cleveland. He remained there until 1911 when he went to Columbia. From 1914 to 1915 he was editor of 'The Druggists Circular;" in 1915 and 1916 he served as president of the American Conference of Pharmacy Faculties and from 1916 to 1920 as a member of the executive committee of the American Metric Association. He edited the "Year Book" of the American Pharmacy Association from 1916 to 1922 and was technical editor of "The American Druggist" from 1928 to 1936.

M. R. Cady

M. R. Cady, head of M. R. Cady, Inc., Grand Rapids, Mich., died suddenly while on a business trip to the east.

John H. Clarke

John H. Clarke, chief chemist at the Everett, Mass., plant of Monsanto Chemical Co., died recently. He was fifty-six years of age.

George E. Esslinger

George E. Esslinger, buyer for twenty-two years for the United Drug Co., died suddenly in Belmont, Mass., November 26. He was fifty-six years old.

Mr. Esslinger was born in Brooklyn, N. Y., and attended the public schools there. Upon his graduation from high school he entered the employ of Parke-Davis Co. and was associated with that company for ten years as buyer.

Lorenz Jensen

Lorenz Jansen, president of the Garfield Tea Co., Brooklyn, died November 12, at the age of seventy-three.

Mr. Jensen joined the firm, which manufactures medicinal tea and headache powders, forty-two years ago, and had been its president for the past fourteen years.

Mrs. John A. Patten

Mrs. John A. Patten, widow of a former president of Chattanooga Medicine Co. and mother of Lupton Patten, the present president, died suddenly of a heart attack November 22. She was seventy-six years old.

INDUSTRY'S BOOKS

Rehabilitation of The Tuberculous, by H. A. Pattison, M.D., F.A.C.P., 194 pp., The Livingston Press, Livingston, New York, $2.50.

The author of this book has been a student of rehabilitation since 1917 and for the past 16 years has devoted all his time to the rehabilitation of the tuberculous. He has visited nearly all the various rehabilitation centers in the United States, England and continental Europe. All phases of the problem are touched upon, including sanatorium treatment, vocational training, placement, compensation, family relief, marriage of the tuberculous, the mental aspects of the disease, allergy and immunity, and the human constitution as it relates to tuberculosis. In Part II the author discusses in-sanatorium education and describes various programs and projects, including those in the United States, England, Holland, Switzerland and other countries.

Handbook Of Plastics, by Herbert R. Simonds, Consulting Engineer, and Carleton Ellis, Late President of Ellis Laboratories, Inc. 1083 pp., D. Van Nostrand Co., New York, $10.

This book is designed to present exhaustively and yet with proper selection the fundamental basis and technology of the plastics industry. It contains nine major sections which are intended to cover fully the present state of the industry, the physical and chemical properties of plastics, their production, manufacture and finishing, and all of the useful information which anyone working with plastics in any part of the industry, or anyone desiring full and complete information on plastics, should find in a well organized and thorough treatment of the subject. Parts I—Introduction; II—Physical Properties of Plastics; III—Materials; IV—Manufacture of Plastics; V—Processing and Fabrication; VI—Chemistry of Plastics; VII—Applications of Plastics; VIII—Commercial Considerations; IX—Appendix—Glossary—Bibliography.

These Mysterious Rays, by Alan L. Hart, M.D., M.Sc., (Med.), 218 pp., Harper & Brothers, New York, $2.75.

This is a non-technical discussion of the uses of X-rays and radium, chiefly in medicine. In addition to the absorbing picture of the patients who stream through the laboratory from morning till night, Dr. Hart explains the actual processes of X-ray, radium, and ultraviolet therapy in simple graphic language, and stresses the dangers of X-rays not only for the patient but for the technicians in the laboratory.

Life, Health, And Horse Sense, by Wm. H. Allen, N.D., 140 pp., Facts Publishing Co., Pasadena, $2.

The purpose of this book is to better acquaint man with his body and its requirements, and through every day living, help him form habits conducive to better health.

Physical Biochemistry, by Henry B. Bull, Ph.D., Associate Professor of Physiological Chemistry Medical School of Northwestern University, 347 pp., John Wiley & Sons, New York, $3.75.

This volume is an outgrowth of a series of about thirty-six lectures which the author gave in alternate years to graduate students in biochemistry, physiology, bacteriology, and neurology. As it is essentially an outline course and must be supplemented by a generous amount of outside reading, literature citations are included for this purpose. Contents: Atoms and Molecules; Energetics; Reaction Kinetics; Electrostatics and Dielectrics; Ions in Solution; Electromotive Force Cells; Acids and Bases; Oxidation-Reduction; Electrical Conductance; Electrokinetics; Surface Activity; Colloidal Solutions; Viscosity and the Flow of Liquids; Diffusion; The Ultracentrifuge; Osmotic Pressure; Membranes and Cell Penetration; Colloidal Structures.

Electronic Interpretations Of Organic Chemistry, by A. Edward Remick, Ph.D., Assistant Professor of Chemistry Wayne University, 474 pp., John Wiley & Sons, New York, $4.50.

Professor Remick's training and experience as a teacher and industrial chemist have enabled him to make this volume a review of the field and an exposition of just how the organic chemist may proceed in using the electron theory in solving his problems. Here is synthesized, from theoretical developments, a set of working rules which permit specific, step-wise descriptions of how to apply the electron theory to problems in pure or applied chemistry. The opening chapters of the book are historical and furnish a background for understanding present development of the electron theory. There is ample critical discussion of evidence on which growing theories are based, and all ramifications of the English theory are gone into in great detail. General discussion on the subject is carried up to the problems that are being solved today and information is given about the men who are trying to solve them.

The Chemistry of the Aliphatic Orthoesters, by Howard W. Post, Department of Chemistry, University of Buffalo, American Chemical Society Monograph Series No. 92, 188 pp., Reinhold Publishing Corp., New York, $4.

It is the purpose of this work to coordinate and present the material now to be found in the literature on the orthoesters of aliphatic carbon, namely those of orthoformic acid and its homologs and of orthocarbonic acid. Space is also given to silicon analogs of these compounds. The subject matter is grouped under headings indicative of reactions rather than of compounds and under subheadings arranged in historical sequence. For instance, the preparation of orthoesters is treated according to method, subdivided chronologically. A separate chapter has been assigned to the orthoesters of the carbohydrate

series because of their unique character. A chapter also has been assigned to the preparation of orthoesters in which the significant atom is silicon rather than carbon, and still another to the properties of these compounds. It is also the purpose of this book to present to its readers, problems which today are without solution. For instance, the existence of addition compounds as intermediates in many reactions discussed in Chapter 3 has not been proved. There is a very apparent tangle of physical properties pertaining to certain compounds prepared by the action of aniline and other amines on orthoesters.

The Conquest of Epidemic Disease, A Chapter In The History of Ideas, by Charles-Edward Amory Winslow, 411 pp., Princeton University Press, Princeton, $4.50.

This is the story of how man solved the mystery of epidemic disease. Dr. Winslow, one of America's distinguished scientists in the public health field, makes a unified narrative of this long intellectual adventure—one of the most difficult and thrilling quests that has ever engaged the mind of man. It is as a history of ideas that the author has regarded his tremendous subject, and the various popular histories of medicine that have been written bear no resemblance to his work. In the pages of this book the reader meets some of the great minds of the ages—Hippocrates, Galen, Frascastorius, Paracelsus, Kircher, Meade, Rush, Chadwick, and many others—and watches them push forward slowly but relentlessly toward discovery of the secret of epidemic disease. The author is Lauder Professor of Public Health at Yale University and Holder of many special awards, including the Sedgwick medal of the American Public Health Association.

Allergy, by Erich Urbach, M.D., Chief of Allergy Service, Jewish Hospital, Philadelphia, with the collaboration of Philip M. Gottlieb, M.D., Associate on Allergy Service, Jewish Hospital, Philadelphia, 1073 pp., Illus., Grune & Stratton, New York, $12.

Here is not just another book on the subject, but a monumental presentation of all phases of allergy, theoretical and applied. The scope of the book embraces the entire history of allergic science, and comprises an authoritative survey of present principles and practice, as well as suggestive discussion of the most promising lines of future clinical and laboratory investigation. Among the practical tools to be found in its pages are: Case material of unmatched diversity, highlighting the "protean variety" of allergic manifestations and mechanisms. Zone calendars of pollination seasons of allergizing plants for every area of the United States. Schedules of prophylactic and therapeutic procedure; short-cut synopses of salient points of differential diagnosis; other graphic condensations of working data. A superb collection of 400 illustrations, showing typical and rare allergic symptomatologies, identifying sensitizing plants and organisms, visualizing latest clinical and laboratory technics. Detailed record forms for patient histories; a table of concentrations for patch testing covering 200 substances. This is really a storehouse of facts on the subject. It is divided into the following three main parts. Part I—Fundamentals of Allergy; Part II—Etiologic Agents of Allergic Diseases; Part III—Symptomatology and Therapy of Allergic Diseases.

With Best Wishes for a

Merry Christmas

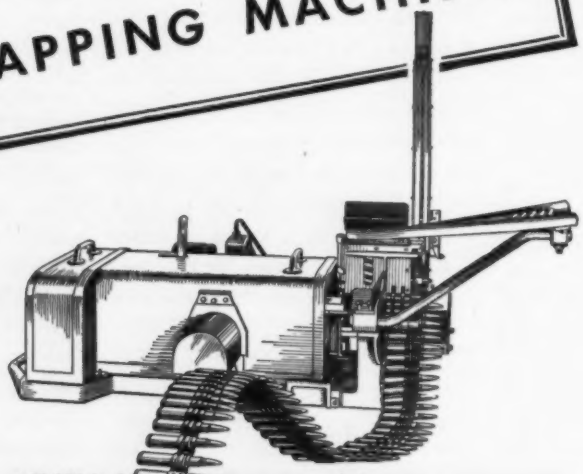
and a

Happy New Year

★

Compagnie Parento, Inc.

There may be an idea here for a better WRAPPING MACHINE



LINKS 150 CARTRIDGES PER MINUTE

When the war ends, you'll expect wrapping machines that embody new and advanced ideas... You'll be most likely to get them from an organization that has kept its wits sharp and its skill at top notch by building not only wrapping machines, but new and intricate armament machines as well.

50-cal. machine gun bullets, for example, are linked at a speed of 150 per minute by a new machine of our invention and manufacture which has proved so successful that hundreds are now serving the armed forces. Portable, comparatively light in weight and operated by power or by hand, this machine can follow the fighting and be used in the most advanced positions.

Other machines built by us are used for piercing and priming cartridges, loading them with powder and projectile, inserting them into clips, packing them into cartons, etc.

The inventive talent, engineering ability and craftsmanship required for this type of work will lead to faster, more efficient and more versatile wrapping machines. ***We are ready now to study your postwar wrapping plans.***

SPRINGFIELD, MASS. NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

PRODUCTION FORUM

By FRANCIS CHILSON
Production Engineer

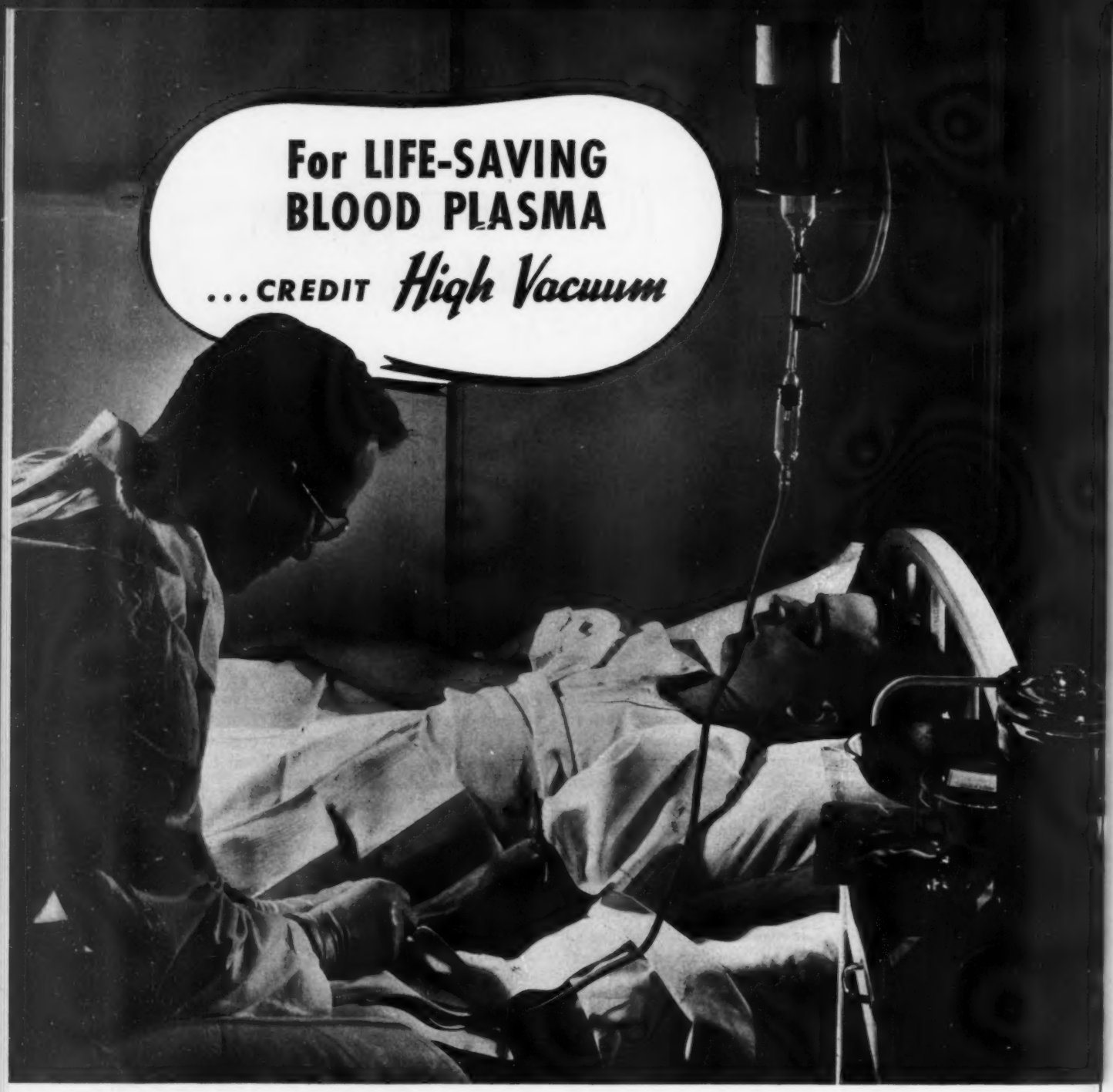
INEXORABLE ECONOMICS

Damn the thing that works! I use this exclamation frequently when I see some cock-eyed installation or stupid construction. One can make the stupidest blunder in the world and possibly never know it because the blunder works. You can build the wrong type of building; you can make a screwball lay-out; you can buy the wrong machine, and as long as an apparently satisfactory performance is secured, the blunder never becomes manifest and its economic effects are concealed in the overhead figures. It is only when a thing doesn't work that the project is thoroughly investigated. Mr. Big gets into it; the directors get into it; everybody gets into it; there's hell to pay, and maybe somebody gets fired. But by that time the blunder has been made and the loss sustained.

I'd like to cite a few case histories of blunders that were made and came to light; of blunders that were made and never came to light; and of blunders that were headed off before they could be made. Sometime ago I was retained by a very large manufacturer of tissue to participate in the development of some new types of equipment on which their engineering and development department had already been working unsuccessfully for many years. It all came about in this way: prior to the time of my appointment a machine had been completed for rewinding, slitting, and perforating tissue on a continuous basis. The machine worked; it performed the job for which it was designed but when its maximum output was measured against the output required for the entire plant, and when further the size of the machine was considered in relation to its capacity, it was discovered that the plant wasn't big enough to house all the machines necessary to turn out the production that was already being obtained with intermittent motion machines. The executive vice-president went on the warpath; he measured the machine personally; he examined the test performance records; he investigated the expenses of the development department and discovered that this single machine had cost slightly more than $150,000 during the several years it had been in course of development. He also discovered that the 20-year effort to develop the desired machine had cost just under three quarters of a million dollars. To say that there was hell to pay would be an understatement. The directors got hold of the figures and there was a first-class row. A number of people were fired; the monstrous mechanism they had created was broken up for scrap and photographed as a horrible example and warning to all future engineers. This machine, incidentally, and all of its predecessors had been designed in detail on drawing boards. When the machines were built and they didn't work, gadget after expensive gadget were hung on them until finally the abortions were abandoned, and new starts were made.

As a result of the row, I was retained to reorganize the department, and a new approach was made along wholly different lines. Our efforts were crowned with success because I never have believed that you can invent anything on a drawing board. I have always believed in making small models first out of wood or scrap iron and then larger ones to test each basic principle until you know you are right; then put it on the board. In the instance cited, a few hundred thousand dollars a year buried in the general overhead accounts could easily be—and certainly was—overlooked in a business having a volume of many millions of dollars annually. Had the machine referred to above been small and compact and reasonably efficient, the plant would have been equipped with them and nobody would ever have known how big the blunder really was.

Recently we examined a construction blunder of the very first water. We visited the plant of a prominent pharmaceutical manufacturer which was built several years ago at a cost of several million dollars. At the time of its construction it was widely hailed in the press and in all the architectural magazines as a noteworthy contribution to industrial design. Its designer was a far-famed industrial architect. The directors made the blunder of assuming that an architect with a great reputation can design any kind of industrial building, whether he knows anything about a particular business or not. The effects of that blunder are buried in the overhead expense figures. When I inspected the building, I was depressed because I had never seen a bigger white elephant. The building is located in the wrong place; it is a multi-story structure, hopelessly inflexible for this type of business, and wholly dependent upon



In wartime medical science fights . . . to mend bodies and minds broken by war . . . to control the diseases that are more prevalent in war.

The availability of human blood plasma, for instant use in emergency transfusions, has already saved thousands of lives in the present conflict . . . will save thousands more.

Credit high vacuum . . . within the micron range . . . for making possible the drying and preserving of blood plasma. Stokes was privileged to assist in the development of this method for drying human blood plasma from the frozen state . . . to engineer and build special vacuum equipment and high vacuum pumps which make possible the large-scale production of plasma and other liable biological and pharmaceutical products which are now required.

Stokes engineers and builds equipment for applying high vacuum methods to many processes . . . also tablet machines and other types of pharmaceutical equipment; tube filling, closing and sealing machines; water stills for laboratory and industrial purposes; and other specialized equipment. Consultation is invited.

F. J. STOKES MACHINE CO.
5932 Tabor Road, Olney P. O., Philadelphia 20, Pa.

F.J.Stokes *High Vacuum* **PROCESSING EQUIPMENT**

FJS Est. 1895

elevators for the movement of materials. Gravity flow? Bunk! The president asked me what I thought of his plant. I told him I thought it was an imposing monument to the founder. The president looked at me ruefully and then said, "You don't have to be tactful. In other words, as a factory, you think it's a white elephant." I said "No, it's a whole damn pile of them."

In new construction, if you forget for a moment that the cost of handling materials is determined by the type of structure you select, you can make some terrifically costly blunders and never be aware of it. Actually you can make pharmaceuticals or cosmetics in a shed or in the Empire State building. All you actually need is floor space. But the question is: can you make them economically? The word cost is only a relative term. Unit cost is simply a means of distributing expense to manufactured items. The cost of a given item in your plant and the cost of the same item in somebody else's plant may never be the same. Unless you operate two dissimilar plants manufacturing the same things, you have no criterion against which to measure your costs or to compare the efficiency of one type of structure, layout and equipment against another.

Quite recently I had the privilege of visiting the plant of a very successful manufacturer who had gone completely conveyor-crazy. I never saw so many miles and types of conveyors. I swear that if you wanted a drink of water, it would be brought to you on a conveyor. That installation was the most expensive to install, and also the costliest way of handling materials I ever saw. When the conveyors were installed, no one in the production or engineering department had had enough outside experience with various types of handling equipment to oppose the wishes of Mr. Big. But, because they have no standard of measurement, no one knows exactly how costly this blunder was. The business is making money; why worry about the cost of depreciation and maintenance; why worry about a few extra men here and there to keep the white elephant moving?

Last week one of my clients had a hot idea about building a trestle from an elevated railway nearby into his factory to eliminate his drayage bill, which amounted to something like $40,000. The cost of the project was estimated at $125,000. On the face of it, it looked like a good investment. The president of the firm told me triumphantly that it would pay out in three years. He was all steamed up to get going right away until I threw very cold water on the whole hair-brained scheme. Depreciation and maintenance on the trestle and on the necessary conveyors that would be required to make it work would amount to $8,700 a year. I then pointed out that at the rate the business was growing, the entire plant would, in a two-year period, outgrow the building altogether, in view of which there didn't seem to be any sense in adding a $125,000 trestle to a building, which would become hopelessly inadequate long before the trestle could be amortized in savings, and which in itself, since the building was 50 years old, would not bring more than $50,000 or $60,000 in the open market. Finally it was pointed out that the trucking bill was high because it was based on rates set up when the business was small and that no one had ever tried by competitive means to beat the rates down. By the simple expedient of a conference with the trucking concern that had enjoyed the business for several years, the freight bill was reduced by $10,000. Moreover, it was pointed out that the final answer was to operate their own trucks as soon as they could get them and to begin at once on the plans for a new plant, so located that trucking to a siding would never be a problem. Incidentally it was also pointed out as a climax, that the whole trucking bill couldn't have been saved anyway because about a quarter of the amount was spent for truck deliveries to local and nearby areas.

Common sense and simple arithmetic are wonderful things if we take time to use them. In this instance had no one headed off the blunder the trestle would have been built and it would have worked; cars could have been brought into the property and unloaded on an apron conveyor and finished goods could have been shipped out. There would have been some apparent saving on trucking, partly offset by depreciation and maintenance costs, and nobody would have known that a blunder had been committed until the expansion of the business had forced the issue of a new plant.

The trouble with costly blunders like this is that they frequently prevent doing the right thing at the right time. Had this blunder been made, it is easy to forecast the action the directors would have taken. They wouldn't have been willing readily to junk such a sizable investment. Instead of being in a position to junk a hopelessly inadequate and inefficient fifty-year old building, they would have insisted on a compromise; they'd get some additional space by buying a lot across the street on which to build a warehouse and from that point on the business would grow from one inefficient unit to another, perpetuating the basically high cost of the principal unit. "As the twig is bent so shall it grow."

In closing let me say a final word about new construction and the place of the architect in it. Don't ever let an architect, regardless of his industrial experience, design your new building. I have worked with some of the best architects in the country. Everyone of them I ever worked with had the same unexpressed motivating purpose, namely to do something striking and unusual in the hope of enhancing his reputation by the publicity his innovation would beget. They have no appreciation of costs, either in construction or operation. I have never known an architect to come within reasonable distance of his own estimates. On the other hand, with few exceptions, they are very reasonable fellows. If you as a preliminary have your production men and engineers make the basic lay-out and determine the location, size and shape of the building, and then turn it over to your architect for decoration and construction, you will not go far wrong.

DRY air helps speed this vital production

Public Vies With Army for Penicillin, Miracle Drug That Comes From Mold
When there is only enough of the newest miracle drug to save either a child or a wounded soldier, which one would you save? Last week, this poser stumped the nation. A New York 2-year-old was improving after red tape had been cut and speed records broken to rush the precious substance to what doctors had feared would be her death-bed. The resultant publicity brought a flurry of other appeals for the lifesaver, virtually all of which has been reserved for troops. Finally, Dr. Warren F. Draper, acting Surgeon General, announced all pleas for the germ destroyer would be passed along to Dr. Chester S. Keefer of the Evans Memorial Hospital in Boston. Here is the story of the drug that brought the question of soldier or civilian survival into sharpest conflict.
One morning in 1929 ther
laboratory accident that
a high mileste
Alexander Flem
tal, London, wa
a common brea
lium notatum,*
coccus (pus ge
*In Latin, penic
—an allusion to
means mark.
with for weeks. His report
on by Oxford Univer-
who concluded that a
excreted by the living
ble ability to destroy
it did indirectly by
ty to white blood cor-
ce, named penicillin,
potent—a dilution of
0 barred the growth
ulties of producing

Pharmaceutical laboratories are working under forced draft to solve problems that will speed production of the many materials needed for the war effort. And, because modern methods require accurate control of manufacturing conditions, you'll find that Lectrodryers figure in many of these developments.

Dehydration under a high vacuum of hygroscopic materials requires that the vacuum be broken with DRY air. Lectrodryers are doing that DRYing job, efficiently and surely, thereby preventing contamination of such products with moisture.

Air, gases, and many organic liquids are being dried with Lectrodryers. Products are improved. Processes are speeded up and standardized. Conditioning of processing rooms makes manufacturers independent of outside weather conditions, keeps them running smoothly the year 'round.

Examine your processes and see if there isn't some place where efficient DRYing will serve you equally well. Then let Lectrodryer engineers solve your DRYing problems. No need for your men to bother themselves with unfamiliar tasks. Write PITTSBURGH LECTRODRYER CORPORATION, 309 32nd Street, Pittsburgh, Pennsylvania.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

PITTSBURGH
LECTRODRYER
CORPORATION

Buy War Bonds

Evans Chemetics, Inc.
250 East 43rd Street, New York
Telephone Murray Hill 3-0077

Evans Chemicals, Ltd.
Boreham Wood, Herts, England
For your English post-war production

{Manufacturing Chemists with Unique Research Facilities}

Homatropine Hydrobromide U.S.P.

HOMATROPINE HYDROBROMIDE is of special importance to the Ophthalmologist, providing mydriasis more rapidly than Atropine Sulphate and with paralysis of the accommodation persisting for a shorter period of time. HOMATROPINE HYDROBROMIDE has less tendency to increase intra-ocular tension than is the case with Atropine Sulphate.

For some time after supplies from Europe were cut off, HOMATROPINE HYDROBROMIDE was unavailable in bulk in the United States, creating a shortage which was keenly felt and which caused deep concern among members of the medical profession.

Today, the alkaloid manufacturing laboratory of S. B. Penick & Company is manufacturing a sufficient quantity to satisfy both military and civilian needs. The quality is well within the requirements of the United States Pharmacopoeia.

Quotations, either for spot delivery or on contract, are promptly forwarded on request.

Aconitine, Amorphous
Aconitine, Crystals U.S.P. X
Allantoin, Penick
Aloin, U.S.P., Penick
Ammoniated Glycyrrhizin, Penick
Arecoline Hydrobromide, N.F., Penick
Asparagin
Atropine Alkaloid, U.S.P., Penick
Atropine Sulphate, U.S.P., Penick

Berberine Acid Sulphate
Berberine Hydrochloride, Penick
Berberine Sulphate, Penick
Brucine
Brucine Sulphate

Chrysarobin, U.S.P., Penick
Colchicine, U.S.P., Penick
Colchicine Salicylate, Penick

Digitalin (so-called German) N.N.R.
Digitonin, Penick

Elaterium, Penick
Emetine Alkaloid, Penick
Emetine Bismuth Iodide
Emetine Hydrochloride, U.S.P., Penick
Ephedrine Alkaloid, U.S.P., (Natural)
Ephedrine Hydrochloride, U.S.P., (Natural)
Ephedrine Sulphate, U.S.P., (Natural)
Eserine Alkaloid, Penick
Eserine Salicylate, U.S.P., Penick
Eserine, Sulphate, U.S.P., VIII, Penick

Helenin, Penick
Histidine, Penick
Histidine monohydrochloride, Penick
Homatropine Alkaloid, Penick
Homatropine Hydrobromide, U.S.P., Penick
Homatropine Hydrochloride, Penick
Homatropine Sulphate, Penick
Hydrastine Alkaloid, U.S.P., IX, Penick
Hydrastine Hydrochloride, N.F., Penick
Hydrastine Sulphate, Penick
Hyoscine Hydrobromide, U.S.P., Penick
Hyoscine Hydrochloride, Penick
Hyoscyamine Alkaloid, Penick
Hyoscyamine Hydrobromide, U.S.P., X, Penick
Hyoscyamine Sulphate, Penick

Jalap Resin, N.F., Penick

Lobeline Sulphate, Penick

Ouabain (Strophanthin-G), U.S.P., Penick

Physostigmine, Penick
Picrotoxin, U.S.P., Penick
Pilocarpine Alkaloid, Penick
Pilocarpine Hydrobromide, Penick
Pilocarpine Hydrochloride, N.F., Penick
Pilocarpine Nitrate, U.S.P., Penick
Pilocarpine Salicylate, Penick
Pilocarpine Sulphate, Penick
Podophyllin, N.F., Penick

Quinine
Quassin, Penick

Sanguinarine, Penick
Sanguinarine Nitrate, Penick
Sanguinarine Sulphate, Penick
Santonin, Penick
Saponin Depurated, Penick
Scammony Resin, N.F., Penick
Scopolamine Hydrobromide, U.S.P., Penick
Sparteine, Penick
Sparteine Sulphate, N.F., Penick
Stilbestrol, Penick
Strophanthin-G (See Ouabain)
Strophanthin-K, U.S.P., XI, Penick
Strychnine

Totaquine, U.S.P., Penick

Veratrine

Yohimbine Hydrochloride, Penick

S. B. PENICK & COMPANY

735 West Division Street, Chicago 10, Ill.
Telephone: MOHawk 5651

50 Church Street, New York 7, N. Y.
Telephone: COrtlandt 7-1970

Buy War Bonds and Stamps — For Victory

ALKALOID EXTRACTING MANUFACTURERS

To all our friends . . .

United for Victory . . .
whether at home
or facing the foe,
We wish
EVERY JOY THAT CHRISTMAS CAN BRING
and PEACE IN THE COMING YEAR!

Tombarel PRODUCTS CORPORATION

12 East 22nd St., New York 10 L. J. Zollinger, President

Original Perfume Creations • Basic Perfume Materials
Aromatic Chemicals and Essential Oils

EMULSIFIERS

For Soapless, Neutral and Acid Emulsions

TEGIN—Glyceryl Monostearate—Self emulsifying. For neutral greaseless creams, lotions and ointments.

TEGIN 515—Glyceryl Monostearate—Non-emulsifying.

TEGIN P—Propylene Glycol Monostearate—Self emulsifying. For brushless shave creams, greaseless creams, lotions, ointments, and cosmetic stockings.

TEGACID—Glyceryl Monostearate — Acid emulsifying. For greaseless anti-perspirant creams and ointments.

TEGACID P—Propylene Glycol Monostearate—Acid emulsifying. For greaseless, anti-perspirant creams, ointments and cream colognes.

TEGO STEARATE—For greaseless creams, lotions and ointments.

LANOLIN ABSORPTION BASES

PROTEGIN X—For nite creams and ointments.

ISO-LAN—For creams, lotions and ointments.

PRESERVATIVES

Esters of Parahydroxybenzoic Acid

TEGOSEPT E **TEGOSEPT M**

TEGOSEPT P

BENZYL TEGOSEPT **BUTYL TEGOSEPT**

GOLDSCHMIDT CHEMICAL CORPORATION

153 WAVERLY PLACE NEW YORK 14, N. Y.

SALES REPRESENTATIVES

MONTREAL BOSTON LOS ANGELES PITTSBURGH CHICAGO ST. LOUIS TORONTO

A couple of years before the war I had an interesting experience with a famous architect who had been employed to design a new building for a prominent manufacturer. He had previously been employed by the same manufacturer to design several other plants. In this instance he had utilized this previous experience and had created a complete set of plans for an imposing monument embodying a type of design which I felt from a material handling and flexibility standpoint was entirely inefficient. In this instance, fortunately, the president supported my view and the building was built in accord with my basic lay-out. Nothing was lost architecturally, and as a matter of fact this building was voted by the local chamber of commerce as the most beautiful industrial building in that state. That it is efficient, too, is attested by the fact that unit costs of identical items are lower in this plant than they are in any of the company's other plants.

In conclusion let me again repeat that because a thing works, it is not necessarily correct or efficient from an economic standpoint. For every advantage you gain, there is a price to be paid. Use plenty of paper and sharp pencils lest the price—even though it can be buried in the overhead accounts—outweigh the advantage. To use an expression, my friend, Howard Sumner, is fond of, "Before we do anything, let's dig into the figures and shake them down."

STOCK ARRANGEMENT

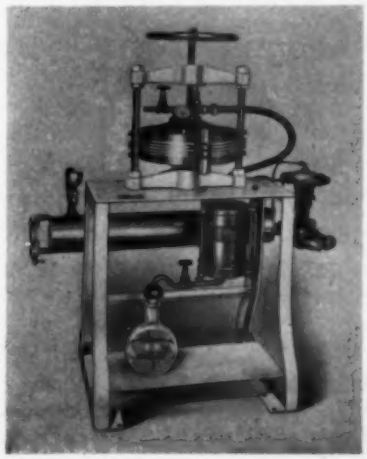
I had quite an interesting discussion the other day about the best method of arranging shelf stock. A survey had developed several different procedures. First there was straight alphabetical arrangement without regard to classes of product. Second there was the straight numerical arrangement according to stock numbers. Third and fourth, there was an arrangement, which applied to alphabetical as well as numerical namely arrangement by classes of product with a subordinate alphabetical or numerical arrangement. Fifth there was an arrangement by which the fastest moving items are grouped together and the progressively less rapidly moving items were relegated to the more remote areas of the shelf stockroom. Coupled with these arrangements there were two schools of thought on replacing stock; one was that each item should be allocated to a definite place on a definite shelf and that it should remain there permanently. Since it is impossible to allot a definite amount of shelf space to an item without terrific waste of space, this method necessitates keeping a reserve stock from which the shelves can be replenished. The other method which utilizes space most effectively is to change the location of the items as it is replenished from the production department and cross-indexing the location of the new lot by marking it on the bin tag of the old one. When the last package of the old lot has been withdrawn, the bin tag tells where the new one may be found. Another advantage of this method is that it not only conserves space but it saves rehandling all or a substantial part of the stock from reserve to withdrawal areas. Its disadvantage lies in the fact that the stock pickers must become accustomed to new locations as items run out.

It seems to me essential in operating a shelf stock department to cut down the mileage the pickers have to travel in the course of a year to reduce the number of errors pickers make in selecting items from the wrong lots or items of different sizes or dosages from those called from on the orders. If different items of the same lot are placed close together and if different sizes of the same items are placed close together, errors in stock picking seem inevitable. Hence it appears that an arrangement placing the fast moving numbers in the most accessible places and using a cross indexed flexible method of stock location would appear to be most efficient, especially when the stock pickers are required to put away the new lots as they come from the production departments. If your shelf stock is large enough to warrant it, you can make this method even more effective by classifying the stock locations by major groups and by assigning a stock picker to each of these groups. This method works particularly well in conjunction with a monorail system or other mechanical handling device. Every situation, of course, requires individual treatment. Sometimes it is necessary to work out a combination of methods.

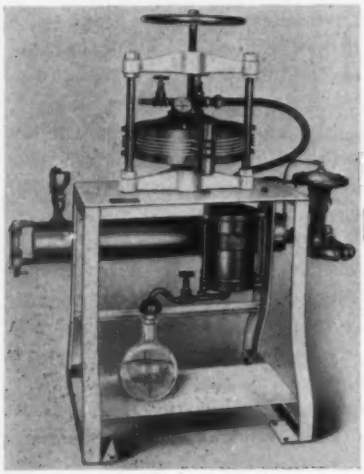
FILTERING STERILE FLUIDS

Fever-producing (pyrogenic) substances which may and frequently do occur in perfectly sterile intravenous fluids can be removed from such solutions with certainty by passing them through newly improved filter discs which not only remove living micro-organisms but also adsorb all pyrogens, it is reported by Drs. Co Tui and A. M. Wright of New York University College of Medicine, New York, in the September issue of Annals of Surgery.

The report which deals first with the biologic and clinical, and secondly with the mechanical aspects of pyrogenic filtration, reflects the results of 42 months of trial, in the course of which 3,867 liters of intravenous fluids prepared by the non-pyrogenic methods were ad-



PENICILLIN



AND

ERTEL PYROGEN RETENTIVE INFUSION FLUID FILTERS

have joined forces to play a most vital part in the protection of our men under arms.

These pyrogen retentive filters have been developed by ERTEL research in collaboration with and according to the protocols set forth by Drs. Co Tui and Wright in their paper entitled "The Preparation of Non-pyrogenic Infusion and other Intravenous Fluids by Adsorptive Filtration", ANNALS OF SURGERY, Sept. 1942.

These pyrogen retentive filters are widely used not only to safeguard penicillin, but blood plasma, saline, and dextrose and other infusion fluids.

For additional data address your inquiry to Dept. PX New York 18, N. Y.

ERTEL ENGINEERING CORPORATION

40 W. 48th STREET
NEW YORK 18, N. Y.

44 MILL STREET
KINGSTON, N. Y.

EPPENBACH ORIGINAL

Triple Action

LIFTS YOUR PRODUCTS TO *Higher* DISTINCTION

STATOR
ROTOR
THIS POWERFUL TURBINE HAS A WHOLLY DIFFERENT DESIGN TO MAKE TRIPLE ACTION MORE EFFECTIVE
IT'S 'WAY AHEAD FOR EMULSIFYING — HOMOGENIZING — GRINDING

● You win quicker consumer recognition when finer qualities are accentuated in your products with the EPPENBACH COLLOID MILL. Its original *triple-action* turbine breaks liquids more violently—its mechanical and hydraulic shearing is micrometrically adjusted even to a point where clearances appear closed. *No air is pulled in!* Temperature is regulated by water jackets. Only moving part is the conical rotor which compensates for wear. Self-cleaning, simple, sturdy. *It assures exact control!*

● APPLICATIONS. *Drugs:* stable emulsions, as mineral oil or agar; to grind and disperse magnesium hydroxide for milk of magnesia; grind glands, chick embryos and tissue for serums and vaccines; grind and smooth salves and ointments; produce colloidal bismuth.

● *Cosmetics:* to grind lipstick; emulsify oils and base for creams; homogenize hand lotions; grind and smooth creams and ointments; impart high gloss to creams.

Send for latest literature.

EPPENBACH INC.

Processing Equipment for Over 30 Years

44-02 11th STREET • • • LONG ISLAND CITY, N. Y.

ministered to 2,654 patients without a single revealed case of pyrogenic reaction.

Based upon a standard pyrogen which the authors were able to prepare, the efficiency of Ertel zero grade pyrogen-retaining asbestos filter sheets could be calibrated, and it was found that the discs, manufactured by the Ertel Engineering Corp., Kingston, N. Y., were uniformly and reproducibly anti-pyrogenic.

Inasmuch as the pyrogenic activity of solutions was found to be directly proportional to their volume, the chances of pyrogenic action in the case of solutions of only a few cc. would be negligible, whereas temperature increases of several degrees were in many cases observed where large quantities of fluid were injected. These increases in temperature never occurred when the solution had been passed through the Ertel filter.

The installation used by the authors in the laboratory of experimental surgery of New York College of Medicine, was an Ertel infusion filter. The commercial production of this filter was developed through collaboration with Francis X. Dealy, Manager for the Ertel Engineering Corp., and are now being used in the production of penicillin for our armed forces.

Large production units, as well as sizes graduated to laboratory experimental work were exhibited by the Ertel Engineering Corp. at the 19th Exposition of Chemical Industries, Madison Square Garden, New York, this month.

THE CHEMICAL SHOW

The Chemical Show is being held this year at Madison Square Garden. If you weren't able to come, don't feel badly. It was rather a stereotyped show, like many of its predecessors. The usual exhibitors were there with the usual things. The chief value of the show consists in the opportunity it affords to meet your friends. Other than that: Period. It was to have been anticipated that this show would produce some startling innovations. Evidently, however, the boys have been so busy with military work that they haven't had time to attend to their own business. There was, however, one or two items somewhat out of the ordinary. Pfaudler exhibited a glass-lined rotary dryer. This job, measuring a couple of feet in diameter and ten feet long, shows promise with some modification of being adaptable as a continuous granulation dryer which could be used for relatively small lots of tablet granulations.

Popper and Klein, Incorporated, showed a straight line ampule washer which looked very good. The Syntron Company exhibited a continuous vibratory infra-red dryer, which looks promising as a continuous tablet granulation dryer. It consists of a vibratory table above which a bank of infra-red lamps is mounted. Originally it was designed for the plastic industry. Ertel Engineering Company exhibited a neat little all-plastic pump, together with the pyrogen-free filter discs and filtering equipment which have been so widely used in connection with the production of penicillin.

Edwin L. Wiegand Company showed a couple of tricky little gadgets, one an immersion heater designed for use in melting petrolatum and other fats out of drums. They showed also heat sealing devices for hand-packaging operations.

One of the most interesting exhibits was that of the U. S. Stoneware Company. This outfit has developed a new type of stoneware called Ceratherm. To show its tremendous ability to withstand thermoshock, the company had on exhibition a piece of Ceratherm with one end immersed in dry ice while the other was exposed to the heat of a direct gas flame. Since the dry ice was probably $-100°$ F. and the gas flame was probably $+1{,}000°$ F., the resistance of the material to extreme thermoshock can be readily appreciated. Ceratherm is much stronger all around than ordinary stoneware and much better able to withstand impact.

So much for the Chemical Show. While I am grousing about this subject, let me say that I wish to God that we could have better exhibitions and fewer of them. It would certainly be a lot more interesting and time-saving if the Chemical Show could be combined with the Packaging Show and with the Canner's Convention. There is a tremendous need for good big industrial exhibitions, which would show a wide range of process and packaging equipment as well as all kinds of auxiliary equipment. It would be a good thing indeed if there were in New York a permanent industrial exhibition. As it is now, if one really wishes to see a few of the new things that are available, he must attend about a dozen conventions and expositions every year. All that whiskey is hard on the system.

CONTROLLERS

One frequently hears gripes about difficulties encountered in operating dryers and other air-treating equipment. Often the dryers are blamed when in reality only the controls are at fault. Ordinary run-of-the-mill controls are manually operated and are calibrated for one set of conditions at a particular point in the cycle. At that point the control is good. When you introduce a new product or change the conditions, there is likely to be a variation of 15 or 20 degrees one way or the other. You can get automatic recording controls, however, which will control conditions within a half a point one way or the other. These controls, of course, are very much more costly.

ADSORPTION DRYING

At the Chemical Show recently I learned a good trick from George (Lectrodryer) Simpson (Taurus, the Bull to you). We were discussing desiccation of materials having highly volatile constituents which would be affected by the least degree of heat. I asked George why it wouldn't be possible to rig up a Lectrodryer so that the rotating beds of activated alumina would alternate with trays of the material to be dried. The idea being to use adsorption only with no air at all. I was thinking especially of vitamin products. George suggested a method that sounds quick and efficient, namely, mix the activated alumina, which is completely inert, with the material to be dried. The activated

BRIDGEPORT...

For the past two years our facilities have been devoted almost exclusively to the production of war materials. We have been fortunate, in that we have been able to handle this work on the same equipment used for our regular peace time products, and, consequently, when material again becomes available for lipstick containers, vanity cases and other metal cosmetic items we will be prepared to start producing our regular line immediately. If you too are planning your post war program, we will be glad to assist you.

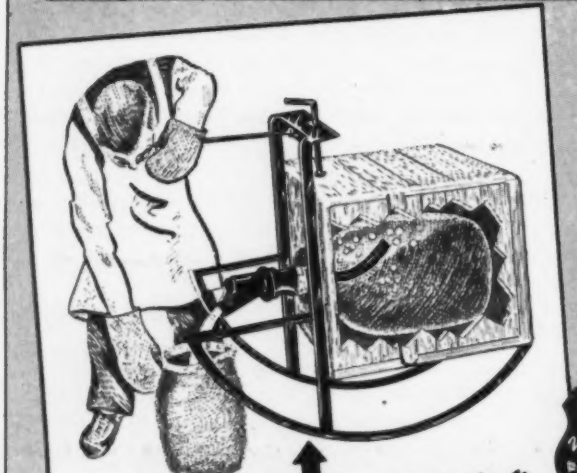
THE *BRIDGEPORT* METAL GOODS MFG. CO.

Established 1909

BRIDGEPORT 'PHONE: BRIDGEPORT 3-3125 CONNECTICUT

VANITY CASES • ROUGE CASES • PASTE ROUGE CONTAINERS • LIPSTICK HOLDERS (ALL TYPES) • POWDER BOX COVERS • EYEBROW PENCIL HOLDERS • BOTTLE CAPS • JAR CAPS • METAL NOVELTIES TO ORDER

FOR SAFE HANDLING OF CHEMICALS



This CARBOY TILTER controls the flow

SAFETY • Wahlert • PRODUCTS

SAFETY CARBOY DRAINER

Send for literature "DCI",

- Prevents accidents caused by splashing and carelessness.
- Uninterrupted flow.
- Air vent eliminates pumping or syphoning.
- Made of hard, acid-proof rubber.
- Soft rubber cuff permits drainer to be attached to carboys.
- All parts are replaceable.

MADE IN THREE SIZES

5 Gallon Size (1¼" to 2⅛")
Standard Size (2¾" to 3") 10 to 13 gallon
Large Size (3¼" to 3½") Special Neck
These dimensions are outside diameters

For INDUSTRIAL SAFETY and FIRE EQUIPMENT

Wahlert Products Corporation

25 LAFAYETTE ST. • BROOKLYN • NEW YORK

alumina, of course, would have to be in coarse granules so that it can be sifted out after it has adsorbed the moisture from the product. I have never tried this trick but will do so at the earliest opportunity. Sounds good.

REMINISCENCE

Inasmuch as the end of the year is approaching, there is some excuse for being loquacious and reminiscent. As you all know, I bought a farm a couple of years ago. But the thing you do not know is why I bought the damned thing. I must confess I was a victim of that peculiar psychosis which afflicts people who have been reared on a farm and who had sense enough to get the hell off it as soon as possible. This psychosis is difficult to describe. It is manifested in such songs as "Back Home Again in Indiana," and in a multitude of poems, especially those of James Whitcomb Riley "The Frost in on the Punk'n" and "The Fodder is in the Shock" and all that baloney. It's a psychosis which is incurable. I've just paid a hell of a price trying to cure my own case but I'm afraid I'm still not cured. There's a saying among the landed gentry to the effect that you leave a farm in order to make money in order to go back to the farm again and lose it. That's about right. By "landed gentry" I mean those farm-psychosis sufferers who've been hooked by some wily real estate agent. In other words they've been "landed". Some day I'll write for you an epistle on what not to do in managing a farm.

Now I'd like to relate the manner in which the farm on which I was reared burst into the public prints not so long ago. That farm is the only one left in the valley of the Mongaup River in New York State. It was called Starlight and is on what was known as the Plank Road. That farm was lovely. But its fields were small and rough so that when you walked abroad you were certain to fall over a rock if beforehand you hadn't already fallen over a stump. Some years after I cleared out to go to college, all of the farms in the valley excluding ours, which was located on fairly high ground, were bought by a power company which built a dam and flooded the entire valley. Our farm was bought by an international figure known as Captain Phillip Giera. He bought additional acreage along the man-made lake until he acquired an estate of some 20,000 acres. Although I never went back to visit the old place until a couple of years ago, all manner of rumors reached me concerning Giera. He was connected with the Nye munitions investigation after the last war; he was accused of being a spy for the Germans and the English at the same time; it was said that he surrounded his property with high fences and armed guards. It was further said that at his laboratory in our old pasture lot all manner of researches were going forward in connection with new types of explosives. Shortly before the war broke out I decided, since I was in that vicinity, to visit the old place and learn what I could of its metamorphosis from an unassuming little farm in a quiet valley to a center of international intrigue. From now on the story sounds like a fairy tale but my wife is witness to what I am about to relate and besides, the whole story broke out in the public prints when Captain Giera was arrested shortly after the outbreak of the war and charged with unlawful possession of arms, etc.

We traveled down the dirt road leading to the farm and when we came to it we swung off the public road into a lane leading into the farm proper. As we proceeded we were suddenly startled by the noise of a couple of powerful horns. We had intercepted a photo electric beam. Directly the horns ceased, we heard the baying of a pack of bloodhounds. Since there was nothing to do but to go forward, we at length came to a gate. Beyond that was a stockade surrounding a house built in the manner of a Swiss chalet. While we were wondering what to do next, a short gray-haired man in a military uniform came forward through the stockade and brusquely demanded to know our business there. I introduced myself and told him that I was merely satisfying an urge to visit the old farm, but I'd be damned if I'd expected a reception like this. He laughed affably and invited us to enter, after commanding the hounds to lie down.

The old house was there below the chateau, pretty much as it always had been. The barns were gone, of course, and in what we used to call our rye field back of the pasture lot, there was a concrete building about 30 by 60 feet. This was the ballistics laboratory. It was completely surrounded by a barbed wire fence 12 feet high and illuminated at night by floodlights. What an odd destiny for the old field wherein I used to hunt rabbits! The Captain invited me to inspect his gardens, and I happened to notice concealed among a group of tall cedars an anti-aircraft gun. I asked him if the gun were a souvenir of his days as an armament salesman. The Captain said that it wasn't and that on the contrary, it was there for his protection. He told me that if I didn't believe it, to examine the gun. I did so, and was amazed to find that it was not only well-greased but it was ready for action. It was a Vickers of the last war's vintage. In another part of the garden, also well-concealed and in operating condition, was a field gun. The spacious house in which he lived was filled with mementos of his career as an arms salesman and of his connections with the Duponts, Vickers, Krupps, Schneiders, et al.

It was an interesting day, and I wouldn't be fool enough to ask you to believe this yarn if everything I said here were not a matter of public record. I visited the place a second time at the Captain's invitation. He wanted me to take over the management of the ballistics laboratory. He said that because of his previous connections with the Axis governments the War Department looked upon him somewhat askance. The suspicion crystallized shortly after the outbreak of the war when the Captain was picked up by a company of state troopers and F.B.I. men. They had heard about the guns but encountered no resistance whatever. This is the history of the farm on which I developed a yen for the soil. Then I bought one of my own, goddamit.

De-Ionized water REPLACES distilled water

10,000 GALLONS FOR LESS THAN A DOLLAR!

. . . on average raw water supply. When supply is low in dissolved solids, cost may be considerably less! . . . A great scientific development for modern industry! Used in many war plants today! *Great savings* are affected by this modern (ion-exchange) method of producing water to *replace distilled water* . . . ILLCO-WAY De-ionizing Units produce water containing less than 1 to 5 p.p.m. of dissolved solids (plus colloidal silica) . . . are daily meeting exacting standards in chemical, pharmaceutical, and other plants.

INSTALLED IN VITAL INDUSTRIES, Illco-Way units are producing purified water, *uniform at all times,* in outstanding plants in many industries, including:

SYNTHETIC RUBBER	AIRCRAFT ENGINE
ALUMINUM	MIRROR
METAL PLATING	CERAMIC
EXPLOSIVES	PHARMACEUTICAL
SILICA GEL	CHEMICAL
BUTADIENE	DISTILLERIES
AVIATION GASOLINE	LABORATORIES

Learn how ILLCO-WAY can speed production, improve quality, help cut costs in *your* plant! Write for literature today.

10 GALLONS PER HOUR FROM LABORATORY UNIT
50,000 GALS. PER HR. FROM FACTORY UNIT
TESTED IN THE LABORATORY
ILLCO-WAY
PROVED IN THE FIELD

ILLINOIS WATER TREATMENT CO.
847 CEDAR STREET • ROCKFORD, ILLINOIS

LUSTEROID VIALS and TUBES HOLD THE CENTER OF THE POST-WAR STAGE

There are many sound reasons why LUSTEROID vials and tubes hold the spotlight in the play for post-war packaging.

LUSTEROID vials and tubes are made to order for any product that must be displayed as well as protected. They are feather-light, yet remarkably strong, rigid and unbreakable. Their crystal-clear walls keep products constantly visible - - - a prerequisite of modern merchandising.

Shipping costs are lowered because these modern plastic containers require no protective packing. Work is saved because there are no labels to affix - - - your message can be reproduced as an integral part of the container.

LUSTEROID comes in all colors of the rainbow, clear or opaque. Sizes range from ¼" to 1¼" in diameter with lengths up to 6". Cork, slip-on or screw-cap closures.

It will pay you to LOOK TO LUSTEROID.

Get full particulars now.

LUSTEROID CONTAINER CO., Inc.

FORMERLY LUSTEROID DIVISION
OF SILLCOCKS-MILLER COMPANY
OFFICE AND FACTORY
10 PARKER AVENUE W. MAPLEWOOD, N. J.
MAILING ADDRESS SOUTH ORANGE, N. J.

NATURAL ABYSSINIAN CIVET

HIGHEST QUALITY IN ORIGINAL HORNS

Samples and quotations on request

J. C. Andresen

132 Nassau St. New York, N. Y.

Phone: BEekman 3-4700

Wishing all Our Friends A Merry Christmas

INNIS, SPEIDEN & COMPANY

Established 1918

117 Liberty Street . . . NEW YORK 6

CHICAGO • CLEVELAND • CINCINNATI

BOSTON • PHILADELPHIA • GLOVERSVILLE, N. Y.

Perfumers Shelf

FILBERT OIL

Until recently, according to E. G. Wiegand in *The Chemurgic Digest* for September 15, 1943, the unsaturated nature of filbert oil made it difficult to use, since it became rancid easily. Indeed, literature published only a few years back indicated that the oil became rancid so quickly as to make it unsuitable for commercial use. However this difficulty was overcome when it was discovered that gum guaic is a good antioxidant.

Wiegand suggests that filbert oil should be useful to pharmacists as a base for laxatives and for liniments. It might also be useful as a base for perfumes, since its unsaturated factor gives it the property of absorbing and retaining odors. Like almond oil, which it closely resembles, filbert oil may well become an ingredient in cosmetic formulation.

Of course, such uses require the first and finer extractions of the oil. Second class oils, produced by petroleum ether extraction or reapplication of pressure, have other potential uses, one of which is to replace olive oil in the manufacture of castile soap.

AGING OF PERFUMES

In these days of war, there is a decided tendency to rush shipments of perfumed cosmetics without sufficient aging. The French have long realized the importance of permitting perfumes and toilet waters to age but with very few exceptions it is not generally practiced by the American producer of cosmetics.

It has long been known that certain changes take place when blends of oils are permitted to stand. In the use of the aliphatic aldehydes for example, many perfumers have found that after their addition to an oil mixture the odor of the aldehyde is very faint and the tendency is to add more in order to accentuate this note On standing for several days reexamination reveals that the aldehyde note is much stronger, and too great a proportion has been added, although the odor did not predominate immediately after the addition. If equal parts of hydroxycitronella and methyl anthranilate are mixed together and permitted to stand, in a month's time the mixture will become very syrupy and the odor will experience a decided change. Realize therefore, what will happen in a mixture of perfume ingredients containing 15 to 20 items. We are not familiar with all the changes which take place within these complex formulations but as in the case of liquors, aging greatly improves the quality of the aroma and flavor. The average user prefers a Scotch or Rye whiskey that has been aged for 6 to 8 years at least, because the aroma and flavor are much finer than a year or two year old product.

When world competition has to be met by the American perfumer it will be well to bear in mind that aging will play an important part.

CAMPHOR FROM BORNEOLS

In studies on the synthetic production of camphor, B. G. S. Acharya, R. C. Shah and T. S. Wheeler (*J. Univ. Bombay* 11A, Pt. 5, 113-15, 1943) found that the best method, one giving a 96 per cent yield, for the preparation of camphor from isoborneol was oxidation by nitric acid in conjunction with sulfuric acid, using the following procedure. Five Gm. isoborneol is dissolved in a mixture of 25 Gm. of 35 per cent nitric acid and 1.7 Gm. of 50 per cent sulfuric acid. The solution is heated at 75-85° C. for 8 to 10 hours, with frequent shaking. The resulting mixture forms two layers. The upper brown layer of camphor is separated and treated with a large volume of water; precipitating camphor, which is dried and sublimed. The acids used at the outset act as a solvent for the isoborneol.

Maximum yields of other oxidation methods tried are: chromic acid, 70 per cent; potassium permanganate, 62 per cent; chlorine, 75 per cent; and, hydrogen peroxide with a trace of manganese dioxide, 48 per cent.

FIXATIVE FOR PERFUMERY

According to British patent 547,536, granted to Stafford Allen & Sons, Ltd. and T. F. West, a fixative for perfumery consists of an oleoresin or gum resin in a substantially odorless glycol or glycol ether.

VOLATILE OIL IN BUCHU LEAVES

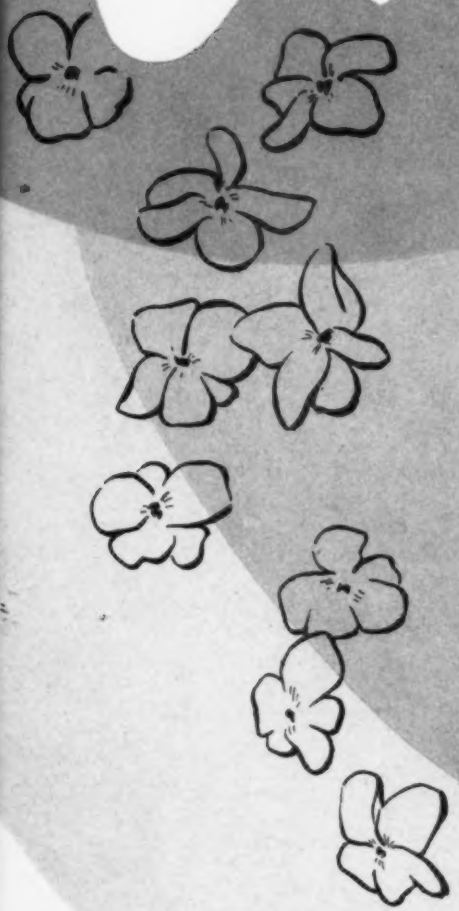
According to J. F. Clevenger (*J. Assoc. Official Agr. Chem.* 26:396, 1943) the yield of volatile oil in buchu leaves and the physical and chemical characteristics of the oil were determined on shipments of short buchu (*Barosma betulina*) and oval buchu (*B. crenulata*) entering the port of New York during the past ten years. The data with regard to the oil of short buchu leaves and oval buchu leaves, respectively, are as follows: yield (ml. per 100 Gm.) 1.07-2.9, 1.2-3.5; d_{25}^{25} 0.943-0.966, 0.924-0.956; α_{25} −15.9 to −34.6°, −8.3 to −21.8°; n_{20} 1.477-1.491, 1.474-1.487; acid no. 2.4-8.0, 1.0-3.4; ester no. 20.4-57.0, 20.0-84.4.

INSECT REPELLING GRASS OIL

According to *Foreign Commerce Weekly* (September 18, 1943) a new kind of grass, possessing peculiar but highly desirable qualities, has reportedly been discovered by H. Morgan, of Venezuela. This grass, known in Venezuela as "gordura," and bearing the botanical name of *Melinis minutiflora*, is said to

ANNOUNCING

Vio-To



FOLLOWING exhaustive studies of t
(or Novoviol) group of synthetics, ou
Laboratories are pleased to announce the
of a new and —we believe — importan
adaptations of these widely used aromati
Judicious use of the five new odor types
the VIO-TONE group will lend pleasant
to the spring and summer lines of perfu
ries and cosmetics now in preparation fo
creating VIO-TONES, our aim has bee
really outstanding products at prices
their use in the widest possible range o
and cosmetic preparations. Your request f
suggestions and prices will bring convin
that we have achieved this purpose.

FRITZSCHE BROTHER

PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW

BRANCH STOCKS

BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANAD

FACTORIES AT CLIFTON, N. J. AND SEILLANS (V

Tones

e studies of the Ionone
ynthetics, our Perfume
nnounce the completion
— important series of
used aromatic materials.
y odor types comprising
lend pleasant variations
nes of perfumes, toilet-
reparation for 1944. In
aim has been to offer
at prices permitting
ible range of perfume
our request for samples,
oring convincing proof
urpose.

VIO-TONE "A"

This product has a neutral, woody sweetness; very distinctive and characteristic.

VIO-TONE "E"

An unusually interesting odor — very deep, earthy and rooty in character, leaning toward orris, but with slight suggestion of a fruity note. Recommended for compositions where a somewhat less "perfumy" effect is desired. Also of interest for soap perfumes.

VIO-TONE "L"

A strong, leathery, somewhat woody scent; very powerful. Recommended for imparting a tart, leathery note. While all of these VIO-TONES have excellent fixation value, this one is especially well fixed and can be employed with good results in Russian leather compositions and in Russian type colognes. Works very nicely in soaps.

VIO-TONE "S"

A deep, sweet tonality, distinctly woody, with a tart and slightly spicy character. Recommended as a basis for French type bouquets and for violet and other floral compositions.

VIO-TONE "O"

While somewhat similar in its basic odor to VIO-TONE "S", this fragrance has a definitely stronger and more leathery character. Suitable for violet compositions, bouquets, toilet water and cologne perfumes. An ideal base for Cuir de Russe, Amber, Peau d'Espagne and other compositions for masculine use. Also very suitable for soaps.

Write for samples, suggestions and prices.

OTHERS, Inc.

H AVENUE, NEW YORK, N. Y.

TORONTO, CANADA MEXICO, D. F.

To our good friends

and customers everywhere—

a word of thanks

a word of greeting .

a word of good cheer

Merry

Christmas

and

A Happy

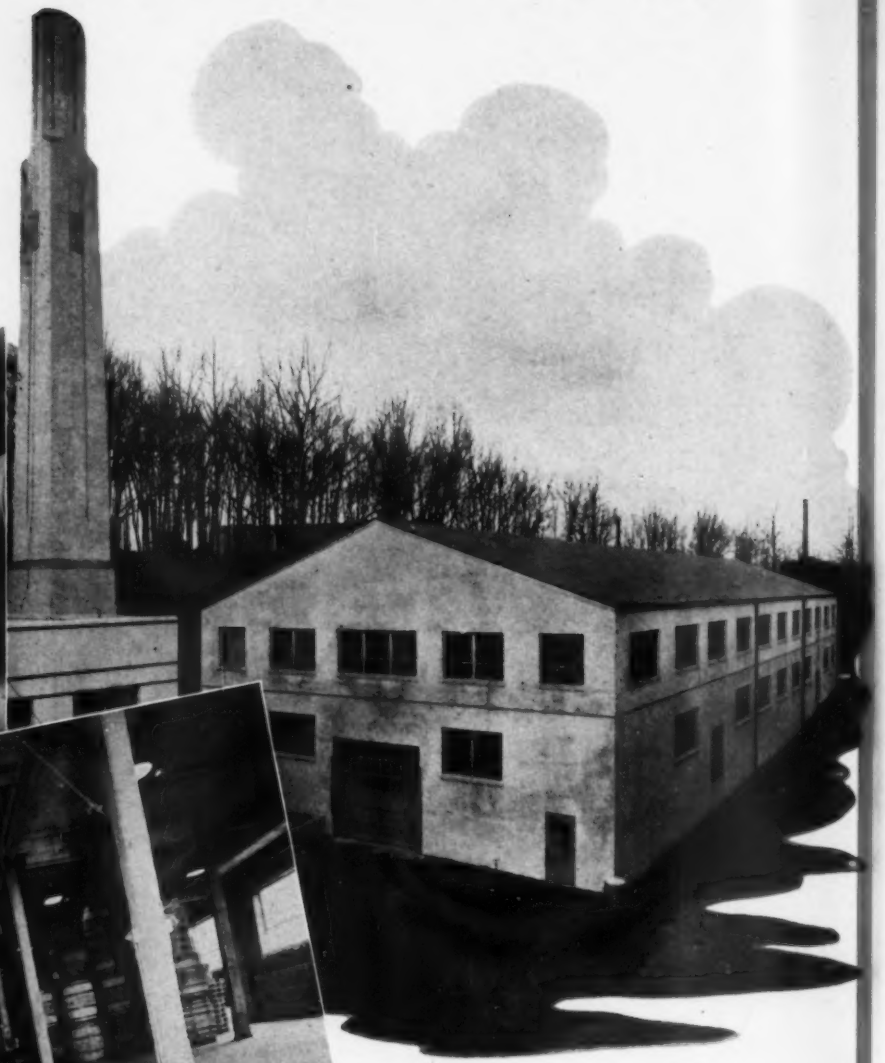
New Year

FRITZSCHE BROTHERS, Inc.

BACKGROUND VALUES . . . a PART of the product, APART from the pr

Photos, left, below: This 3-tier drum rack in our New York plant accommodates over 250,000 lbs. of essential oils. Beneath is an interior view of storage facilities provided by our new warehouse at Clifton, N. J.

Right: Exterior view of new warehouse. Located adjacent to our Clifton plant, this building provides additional convenient storage space for raw materials and reserve stocks.



THE value of ample storage and warehousing facilities is more apparent in normal times than at present when raw material shortages introduce a disrupting influence upon business. Even so, our spacious facilities both in New York and Clifton have helped us to maintain a steadier flow of finished materials than would have been possible under less favorable circumstances. Normally, our patrons' dividends from such facilities would be on the side of economy as well as convenience, for they would enable us to maintain a constant reserve of raw materials purchased at a time when crops were best, yields highest and prices most favorable. The advantages and economies inherent in the convenience and adequacy of our present facilities are no small factors in the all-around satisfaction purchasers derive from our goods.

FRITZSCHE BROTHERS, Inc.

PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW YORK, N. Y.

BRANCH STOCKS

BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.

FACTORIES AT CLIFTON, N. J. AND SEILLANS (VAR) FRANCE

Headquarters for ESSENTIAL OILS • FLAVORS • AROMATIC CHEMICALS • PERFUME RAW MATERIALS

have the extraordinary property of repelling insects of all kinds, including mosquitoes and ticks, and of being very distasteful to snakes. It exudes an oily substance with a strong odor that is pleasant to humans but which keeps all bugs at a distance. Hardly a mosquito, it is alleged, was seen over areas sown with this grass. Snakes, adds Morgan, will not come within smelling distance of it. Cattle, heavily infested with blood-sucking ticks, were reported free of them in a few days after grazing on this grass.

ANALYSIS OF MASCARAS, EYE BROW PENCILS AND EYE SHADOWS

Continuing the cosmetic analysis series of reports, J. W. Fuller (*J. Assoc. Official Agr. Chem.* 26:317, 1943) lists the ingredients commonly entering into the composition of mascaras, eyebrow pencils and eye shadows. Since the base materials are in all cases similar, he is of the opinion that the same procedures of examination should be generally applicable to all three types of cosmetics. The following methods of analysis are proposed. *Qualitative test for metals:* careful spectroscopic examination of the ash from approximately one Gm. of sample. *Detection of coal tar dyes* (presence of which is prohibited in products used in the area of the eye): double-dyeing on wool, the technic varying for water-soluble acid and basic dyes, oil-soluble dyes, and lakes. *Volatile matter, solid matter and ash:* heat about one Gm. in a platinum dish for 5 hours at 100° C., cool and weigh; carefully ignite the residual to a white ash at low heat, and weigh. *Arsenic:* the official Gutzeit method was followed, but Fuller feels that much work remains to be done on the determination of arsenic in products rich in organic matter, such as fats and waxes. *Titanium dioxide:* ash over a low flame, fuse carefully with potassium bisulfate for about fifteen minutes, and determine titanium colorimetrically by the hydrogen peroxide method. In the presence of interferring metals such as chromium and iron, fuse the ash with sodium carbonate, leach with water, filter, and fuse the residual with potassium bisulfate.

BRUCINE FOR BITTERNESS

It is not generally realized that brucine, an alkaloid used for denaturing alcohol and inedible oils, is perhaps the bitterest tasting substance known. According to *Monsanto Magazine* (Oct.-Nov. 1943), on the basis of 100 for quinine bitterness, brucine would have a rating of 1,000 to 1,250; strychnine 320; caffeine, 50; and, theobromine, 5.

ANTIBACTERIAL ACTION OF SWEAT

It having been shown that thermal sweat may have fungistatic and fungicidal properties at a pH below 7, O. Bergeim and T. Cornbleet (*Amer. J. Med. Sci.* 205:785, 1943) undertook to make a study of the antibacterial action of lactic acid and the volatile fatty acids of sweat. To induce profuse perspiration, the subjects were incased in a rubber bag as far as their necks and seated in a heat cabinet. As a result of these studies, it was found that sweat as secreted contains lactic acid in amounts sufficient to give it some bactericidal action. Evaporation on the skin increases the lactic acid concentration and renders the sweat much more effective. The concentration must be such as to give a pH of 5.3 or lower for the lactic acid to have much effect. The volatile fatty acids of sweat appear to be formed by bacterial action on the lactic acid. They are present in smaller amounts than lactic acid in sweat but are relatively more effective in the range of pH 5.3 to 6.2. They may therefore extend the antiseptic action of the sweat into the regions of the skin where this pH range prevails and thus act as an additional safeguard against skin infections. This can be of some importance in such regions as the axillae which are relatively less acid.

ANTIOXIDANT FOR FATS AND OILS

According to U. S. Patent 2,333,655 granted to H. A. Mattill and C. Golumbic (assignors to Lever Brothers Co.) on November 9, 1943, an antioxidant for fats and oils is comprised of a small amount of ascorbic acid and a small amount of one of several compounds related to vitamin E, e.g. tocopherol type compound selected from the group consisting of hydroxychromans, tocopherols, alkyltocols, hydroxycoumarans, hydroxycoumarones, hydroxyisocoumaranones and the chroman-5,6-quinones and their precursors. It is claimed that the combination of ascorbic acid and vitamin E-related materials produces a synergistic action of inhibiting oxidation and the development of rancidity in the oleaginous matter.

Another patent (Pat. No. 2,333,657) granted the same inventors, specifies the use of a small amount of caffeic acid for the same purpose.

TREATMENT OF CHIGGER BITES

In the treatment of chigger bites, says H. J. Parkhurst (*Ohio State Med. J.* 39:639, 1943), there are three objectives: (1) the destruction or removal of all remaining parasites, both free and attached; (2) the relief of the severe itching by palliative measures; (3) the treatment or prevention of secondary infection. The mites, if any remain, are most readily removed by an application of benzine, kerosene or copper compound, followed by bathing for a half hour with plenty of soap lather. This should be followed by thorough rinsing with fresh water and patting dry rather than rubbing with a towel. Since active mites may remain in infested clothing, it is advisable that all articles be boiled or sent to a dry cleaner.

A variety of palliative measures has been suggested, but Parkhurst has found that brief application of rubbing alcohol to the affected areas, followed immediately by a mild antiseptic, antipruritic ointment is satisfactory. A clean and generally effective application has been that of boric acid ointment U. S. P., to which may be added from 1 to 2 per cent of phenol, the strength being in inverse proportion to the area of the skin to be covered, and 0.2 per cent of menthol. This ointment should be applied sparingly at least three times a day and also used as needed to relieve itching; it is to be rubbed in gently, and the remainder is wiped off with cotton. A little plain talc may then be dusted over the surface. These applications are made after the daily bath and at least two other times daily. Scratching must be avoided. Secondary infection, when it occurs, should be treated as required.

Infestation may be prevented by the use of protective clothing and by parasitocidal applications. Sulfur has long been recommended as a repellent. One investigator dusted in uniformly over the skin or into the clothing with a shaker, and found it effective. It should be dusted freely on the legs and ankles and inside the hose and trousers. As an added precaution one should bathe as promptly as possible after exposure to chiggers in order to remove the somewhat irritating sulfur and to destroy any surviving mites.

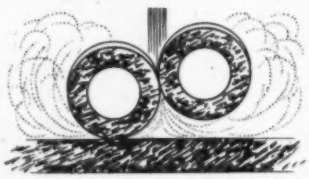
Are you having any trouble with your SOAP?

Over 40 years ago, the first Neutral Powdered White Soap was introduced to the manufacture of cosmetics and proprietary remedies by the House of Hopkins. Though perfected through the years by various technical improvements, Hopkins' Rajah Brand Neutral Powdered White Soap is today made *under the same original formula and process.* Not one, but many, qualities account for this remarkable fact. For example, Hopkins' Neutral Powdered White Soap gives you—

- *extreme snow-whiteness*
- *thoroughly neutral taste*
- *total absence of free alkali*
- *low moisture content and very low residue of alcohol, water and sodium carbonate*
- *resistance to varying temperatures*
- *good meshing quality*
- *a non-rancid, non-hardening, fine-looking finished product*

Send for a free sample to use in a trial batch, stating the nature of your product. Quotations on request.

COLD GRANITE MILLING and what it means to you



To insure against discoloration and rancidity which usually develop from excessive heat in the process of milling, Hopkins' Neutral Powdered White Soap is milled between slow geared chasers (only 70 rpm). This method is slower and more painstaking, yet our prices compare favorably with lesser qualities, due to our large production.

J. L. HOPKINS & CO.

220 BROADWAY NEW YORK

THE HANDS that WORK for VICTORY can STILL BE BEAUTIFUL

DURLIN will play its part in upholding civilian morale by continuing the flow of nail enamel to the leading cosmetic packagers. Their products are helping to maintain the fine spirit of the American women during the present period of emotional stress.

Copyright 1942 by

THE DURLIN CORPORATION

11 WEST 42nd ST. NEW YORK, N. Y.

The COMPOUNDER'S CORNER

DENTAL ABRASION AND SOLUTION

The difficulties and uncertainties accompanying evaluations of experimental data on abrasion or solution by a dentifrice or the conditions responsible for dental caries, led W. Souder and I. C. Schoonover of the National Bureau of Standards to seek a more definite method for detecting dental injuries. Knowing that the pressure of the Knoop pyramidal-diamond indentator produces indentations of definite depth, width and length, they used this instrument to secure visual evidence of the progress of injury to teeth.

In their report in the *Journal of the American Dental Association* (30:1725, 1943), these workers explain that surfaces of enamel or dentin so marked and photographed may then be exposed to the action of an abrasive, a chemical or a dentifrice and again photographed after the exposure. The changes will be evident when the photographs are compared. From such comparisons, it is possible to establish on a single tooth the damage to enamel or dentin developed during the experimental procedure. This definite advantage is not inherent in many other methods employed for studying these problems. In addition to the more definite visualization of the injury to teeth, permitted by this procedure, the method described is very rapid; results being obtained in a matter of hours or days as compared to other methods requiring weeks or months. Thus, with the Souder-Schoonover procedure, the injury to enamel from a dentifrice containing harsh abrasives is definitely evident after twenty-five minutes brushing with a tooth brush using a technic similar to that employed daily by millions.

Investigations of certain brands of dentifrices showed that injury of enamel and dentin occurs from the use of a preparation containing a decalcifying agent (e.g. sodium metaphosphate). The effects of a few solutions of sugars and different degrees of acidity of sugar solutions were studied. Sterile sugar solutions appeared to be harmless, but when inoculated with saliva, these solutions rapidly changed to acid solutions and vigorously attacked the surfaces of the teeth. Pressure of other work has forced the abandonment of further investigations with this new method on other substances used in dentistry and in dentifrices.

ANTIDERMATITIS CLEANSER

According to an item in *Chemical and Engineering News* (21:1753, 1943), a British research group has found that a washing compound containing approximately 75 per cent of borax and 25 per cent of dry soap possesses desirable fungicidal properties and yet is so mild in its action on the skin as to reduce any tendency to dermatitis. The borax is in finely granulated form so that, when mixed with the dry powdered soap, gumming or caking is avoided. The product is said to be a good cleanser, one that will effectively and without waste remove dirt from the hands. The borax is not to be considered merely as a diluent for the soap, but contributes certain desirable properties to the cleanser. Readily soluble, it provides a temporary abrasive action and has detergent and slight water-softening properties of its own.

VITAMINS FROM ROSE HIPS

Last year, F. Wokes and his associates reported that vitamin C in rose hip syrup was unstable; its rate of destruction being affected by storage temperature, air exposure and water content. To maintain the vitamin potency these workers evolved the following method, as reported in the *Pharmaceutical Journal* (151:89, 1943), for making a dried rose hip extract:

Using freshly collected rose hips, aqueous extracts were prepared, care being taken to prevent destruction of the vitamin by the oxidizing enzymes, and these extracts were rapidly evaporated to dryness *in vacuo*. The product was a golden brown powder containing only about one per cent of moisture in which the active principles had been concentrated without any significant loss of vitamin C. This ranged from 1000 to 1400, and averaged 1250 mgm. per 100 gm. Storage of these extracts for 75 days at 37° C. showed only 7 to 8 per cent loss, compared with 50 to 75 per cent in syrups kept under the same conditions. The loss after 248 days at 37° C. was about 15 per cent. Storage at room temperature and in the refrigerator for about eight months has not been long enough to produce any significant loss of vitamin C.

The determination of the vitamin P content of one of the dried rose hip extracts gave the high figure of 520 G.L. units per gm., compared with 3 units per gm. for rose hip syrup and 95 units per gm. for recrystallized hesperidin. Carotene was found in some British species of rose hips and biological tests are in progress to determine its value.

COSMETIC MATERIAL FROM SILK

British patent 555,044, granted to S. G. Phelps relates to the production of powders from materials containing silk; such powders being principally intended for use for cosmetic purposes and for pharmaceutical purposes such as ingredients in ointments, antiseptic dusting powders, skin lotions and poultices. These powders are produced by first subjecting cleansed and degummed silk to treatment by a solution of alkali and then neutralizing by a suitable acid; the

PLYMOUTH WAXES *for* CREAMS

PLYMOUTH Genuine Spermaceti U.S.P.

This Spermaceti should not be confused with inferior hydrogenated sperm oils which are sometimes offered as Spermaceti The Plymouth Brand is the finest which can be produced and is produced from Genuine Sperm Oil by the cold pressing method. It is a very white crystalline wax containing no free oil, has a very low Iodine number and is free of any offensive odors.

PLYMOUTH Ozokerites

We offer two grades One is the highest quality obtainable, 76°-78° C melting point and the other grade lower in price and of lower melting point 66°-68° C. Both are guaranteed 100% Pure Bleached Ozokerites.

PLYMOUTH Sun-bleached White Beeswax U. S. P.

This is guaranteed to be a 100% Pure Beeswax and sun-bleached It is refined by the centrifugal method which removes all and every trace of foreign matter: We will gladly send samples.

PLYMOUTH White Cirine Wax

A special grade of White Ceresin Wax prepared for the cosmetic trade Absolutely white and odorless. It has a melting point corresponding to that of Beeswax so that in using it in connection with Beeswax in cream any "lumpiness" is avoided. Its use will also produce a very glossy cream.

PLYMOUTH Paraffin Waxes

We offer all grades of the U S P fully-refined Paraffin Waxes.

A COMPLETE LINE OF COSMETIC RAW MATERIALS

M. W. PARSONS

59 BEEKMAN STREET
NEW YORK, N. Y., U. S. A.

Imports
and PLYMOUTH ORGANIC LABORATORIES, Inc.

Telephone. BEEKMAN 3-3162—3163—3164
Cable Address. PARSONOILS, NEW YORK

We Offer the Following From Stock

ALOES, Curacao and Cape
ALTHEA ROOT
ANISE SEED
BALSAM COPAIBA
BALSAM PERU
BALSAM TOLU
BELLADONNA Leaves and Root
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CARAWAY SEED
CELERY SEED
CHAMOMILE FLOWERS
CHAULMOOGRA OIL
CLOVES, Zanzibar
COCILLANA BARK
COLOCYNTH PULP
COLOMBO ROOT
CORIANDER OIL AND SEED
CUMIN SEED
DANDELION ROOT
DILL SEED, Indian
ERGOT OF RYE
FENNEL SEED, Indian
FOENUGREEK SEED
GENTIAN ROOT
GINGER, Jamaica, Calicut
GRAINS OF PARADISE
GUM ARABIC AMBER SORTS
GUM KARAYA
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES
KAMALA POWDER
LAUREL LEAVES
LAVENDER FLOWERS
LINDEN FLOWERS, with Leaves
MAHUANG, Chinese
MARJORAM LEAVES
NUX VOMICA
OAK MOSS
ORANGE OIL, Sweet
ORRIS ROOT
PEPPERMINT OIL
PIMENTO, Jamaica
POPPY SEED, Indian
PSYLLIUM SEED AND HUSKS
QUINCE SEED
RHUBARB ROOT
ROSEMARY LEAVES
ROSEMARY OIL
SAGE LEAVES
SARSAPARILLA ROOT
SAVIN OIL
SAVORY
SENNA LEAVES AND PODS
SESAME SEED, Hulled and Natural
STRAMONIUM LEAVES
STROPHANTUS SEED
THYME LEAVES & OIL
UVA URSA LEAVES
VALERIAN ROOT

AMINOPHYLLINE
BARBITAL
COD LIVER OIL, Medicinal and Poultry Grades
EHPEDRINE SALTS
GUM CAMPHOR, Japanese and Domestic
ICHTHAMMOL, N.F.
STRYCHNINE SULFATE
VITAMIN PRODUCTS
WAX, JAPAN

• Other Imports Arriving Daily. • We Offer a Complete Line of Pharmaceutical Pills, Tablets, Liquids and Ointments.
• All Orders and Inquiries Given Immediate Attention.

KACHURIN DRUG COMPANY

Manufacturers • *Importers* • *Exporters* • *Distributors*

DRUGS - CHEMICALS - OILS - BOTANICALS

525 West 43rd Street, New York, N. Y.

Telephones: BRyant 9-7400-1-2-3-4 • *Cable Address:* Kachurin, New York • *Codes:* A. B. C. 5th & 6th Edition and Bentley's

product is then washed in water, dried, ground to a powder and passed through a fine screen.

DESTRUCTION OF VITAMIN A IN OILS

In a recent study by the Fisheries Research Board of Canada, B. E. Baily (*The Stability of Vitamin A During the Household Storage of Medicinal Oils*, Bulletin No. 54:15) emphasized the need for the protection of fish liver oils in the home. These studies confirmed that heat, light and air all cause destruction of vitamin A. Loss of vitamin A potency ranged as high as 83 per cent; varying according to the conditions of the experiment simulating home practices. Oxidation was found to be the most significant factor in the destruction of vitamin A, with light and heat of secondary importance.

PREVENTING POISON IVY DERMATITIS

In a series of studies, including field exposures, a so-called "finger test" and clinical investigations, J. B. Howell set out to make an evaluation of old and new measures recommended in the prevention of poison ivy and poison sumac dermatitis. His findings, reported in the *Archives of Dermatology and Syphilology* (48:379, 1943), are rather discouraging. He found that there is no suitable topical prophylactic substance for preventing poison ivy dermatitis or for mitigating the eruption after contact has occurred. From experimental studies, a 10 per cent solution of potassium permanganate prevented or diminished the severity of ivy dermatitis in most instances if employed during the first fifteen minutes after exposure. Thorough washing with soap and water and preexposure anointing of the skin with white petrolatum, 10 per cent ferric chloride ointment or 10 per cent sodium perborate ointment or the use of 10 per cent solution of ferric chloride after exposure to the plant did not prevent ivy dermatitis.

MORE GERMAN COSMETIC PATENTS

Here are two additional abstracts of German patents that should be of interest to cosmetic technicians.

The first, covered by German patent 725,945, granted to R. Muller, is *a preparation for skin care and for use as a deodorant*. The preparation is made of silicon formate anhydride mixed with the usual powder or salve base.

The second, a patent for a *hair wash* (Ger. Pat. 725,474, to Deutsche Hydrierwerke A.-G.), utilizes water-soluble salts of sulfuric acid esters of polyhydric alcohols simultaneously esterified with soap-building carboxylic acids.

BULGARIAN MEDICINAL PLANT

According to *Foreign Commerce Weekly* for October 23, 1943 it has been announced that the wild plant, podubiche, grown in certain areas of Bulgaria, is valuable in treating malaria and dysentery. The Director of the Royal Institute of Natural Science declares that the plant is a remedy for malaria, particularly tertian and quartan fevers, as well as for infantile diarrhea and for dysentery among adults. For malaria, the leaves are boiled to make a strong tea; for dysentery, the entire plant, including roots and leaves, is boiled in the same way.

NEUTRAL PROFLAVINE SOLUTIONS

The highly antiseptic properties of proflavine, combined with its low toxicity, have brought this drug into widespread use, especially in British military medicine. However, A. Albert and W. Gledhill (*Australasian J. Pharm.* 24:388, 1943; also, *Pharm. J.* 151:87, 1943), warn that a 0.1 per cent solution of proflavine sulfate B.P. has a pH value of 2.5 and that this degree of acidity cannot fail to irritate delicate tissue. Fortunately it is a very easy matter to correct this acidity at the time of dispensing and a suitable 0.1 per cent solution may be prepared as follows: Warm 1 Gm. of proflavine sulfate B.P. and 0.25 Gm. of sodium bicarbonate with 40 cc. of water until dissolved, cool, and dilute to 1 liter. This solution, which is free from deposit, provided pure materials have been used, is stable, and has a pH value of 6.0, which is non-injurious. Like all "flavine solutions, it is decomposed by light and must be stored in brown bottles. The formation of any deposit in solutions of acridine antiseptics is evidence of their inactivation.

APPLYING CALAMINE AND NEOCALAMINE

G. Goodman (*Arch. Dermat. & Syphil.* 48:369, 1943) offers additional methods for improving the appearance and application of calamine and neocalamine preparations. Stressing the importance of skin color matching for individual patients, he points out that a neutral soap suspension of stearic acid and triethanolamine is an excellent vehicle for the prepared calamine and the prepared neocalamine. With such a vehicle, the powders settle slowly if at all. A suggested formula for making such suspensions of colored zinc oxide is the following:

	Gm. or Cc.
Stearic acid	4
Triethanolamine	1
Water, enough to make	100
To which add	
(*a*)	
Prepared calamine	8
Zinc oxide	8
or (*b*)	
Prepared neocalamine	15
or (*c*)	
Prepared neocalamine	8
Zinc oxide	4

DIASONE, NEW CHEMOTHERAPEUTIC AGENT

Although synthesized in 1937, Diasone (disodium formaldehyde sulfoxylate diaminodi phenylsulfone) has only recently been reported in the literature as a promising new chemotherapeutic agent. From the experimental studies of G. W. Raiziss (*Science* 98:350, 1943) it appears that Diasone has a low toxicity when tested on mice, rats, rabbits and dogs. Therapeutically, it was found that when mice were infected with a specific streptococcus hymolytic strain, the new drug proved to be as effective as sulfanilamide. In similar experiments, performed on mice infected with pneumococcus type II, Diasone appeared to be nearly as effective as sulfadiazine.

However, the most important therapeutic property of this chemical compound manifests itself in experimental tuberculosis. When compared to other chemotherapeutic agents, including the new product, Promin, it was found that when mortality and histological changes due to tuberculosis in guinea pigs were considered, Diasone produced the most beneficial therapeutic results. Other investigators have also found Diasone to be an effective therapeutic agent in experimental tuberculosis. It is the opinion of Raiziss that this drug gives promise of favorable clinical application in tuberculosis. The drug is water soluble, forming fairly concentrated solutions which may be stabilized by the addition of small quantities of sodium bicarbonate.

This fellow has to be thought about

He is learning co-ordination. He's ambitious to start places and do things. There's a father and mother who would steer him right and 130 million other Americans who wish him well. It is the most important part of our job to make this world a safer and better place for him.

We may not get what we want today with priorities, rationing, high taxes, etc., but what of it? Others sacrificed for us that we might have the comforts and the good we have enjoyed. Now it's our turn to sacrifice for this fellow at the top of the page and his prototypes.

To keep your machinery effectively running on the home front is essential to both a war and peace economy. We can serve our customers now in repair work and with such machines as are needed in vital industries.

U. S. BOTTLERS
Machinery Co.
4011 N. ROCKWELL ST., CHICAGO

MANUFACTURERS OF
PUMPS
CAPPERS
FILTERS
CONVEYORS
WASHERS & DRYERS
WASHERS
CORKERS
FILLERS

"Ah · · · the mark of quality appears!"

. . . It's no mystery, really. Solvay Snowflake Crystals are well-known *everywhere* for their excellent qualities as a bath crystal base!

SOLVAY SALES COMPANY
Alkalies and Chemical Products Manufactured by The Solvay Process Company
40 RECTOR STREET NEW YORK 6, N.Y.

BRANCH SALES OFFICES:

Boston	Cincinnati	New Orleans	Pittsburgh
Charlotte	Cleveland	New York	St. Louis
Chicago	Detroit	Philadelphia	Syracuse

SOLVAY
Snowflake Crystals

THE NAME SOLVAY IS YOUR ASSURANCE OF QUALITY

RENÉ FORSTER

Formerly Vice-President of

The Bayonne Company, Inc.

ANNOUNCES

that he will carry on under the name

RENÉ FORSTER COMPANY

the business formerly conducted by The Bayonne Company, Inc.

with offices at

404 Fourth Avenue New York 16, N. Y.

Aromatic Chemicals ***Essential Oils*** ***Specialties***

September 1, 1943 Telephone: MUrray Hill 5-0250

GELLOID

(*Pure Calcium Carragheen Sulfate*)

Binder:

In tablet making.

Moisture Retention:

Unexcelled for paste dentifrices.

Quick Dry Preparations:

Very compatible with alcohol.

JACQUES WOLF & CO.

Manufacturing Chemists and Importers, PASSAIC, N. J.

WAREHOUSES: Providence, R. I., Philadelphia, Pa., Utica, N. Y., Chicago, Ill., Greenville, S. C., Chattanooga, Tenn., Los Angeles, Calif., Columbus Ga., Knoxville, Tenn., Charlotte, N. C.

Automatic filling and sealing

No tin? . . . use paper packets

Automatic filling and sealing of paper packets is fast and economical. Packets offer many merchandising advantages. Send quantity of your material for test purposes . . . for return to you in packets . . . for report. No obligation. Write, wire or phone for full details.

THE BROWN BAG FILLING MACHINE COMPANY
FITCHBURG, MASS.

West coast representatives:
Peter D. Bowley & Associates
369 Fifth St., San Francisco, Cal.

for powders, granules, crystals

LET WHITTAKER
FURNISH YOUR
Face Powder Ingredients

TALC

ALBATEX

STEARATES

COSMETIC COLORS

COSMETIC TITANIUM

MAGNESIUM CARBONATE

COLLOIDAL KAOLIN

PRECIPITATED CHALK

WHITTAKER

WHITTAKER, CLARK & DANIELS, Inc.
260 W. Broadway, N. Y. C. • Plant: South Kearney, N. J.
SALES REPRESENTATIVES
Chicago: Harry Holland & Sons
Philadelphia: Peltz & Company
Toronto: Richardson Agencies, Ltd.
Cleveland: Palmer Schuster Company

LANOLINE

Anhydrous Hydrous
U. S. P.

ROWAG

BEESWAX

Sunbleached Yellow
U. S. P.

ROBINSON
WAGNER CO.

MANUFACTURERS AND REFINERS
110 East 42nd St. New York 17, N. Y.

ADVANCING THERAPY

VITAMIN A FOR ACNE

Commenting on the fact that explanations offered for the causation of acne are both obscure and conflicting, J. V. Straumfjord (*Northwest Med.* 42:-219, 1943), points out that the primary lesion of acne is a hyperkeratosis of the pilosebaceous follicle identical with the hyperkeratosis described in vitamin A deficiency. Patients with acne visiting his clinic were given vitamin A in high doses. A study of 100 of these cases, treated with a supplenent of approximately 100,000 international units of vitamin A daily for six months and longer, indicates the value of such therapy. Seventy-nine of this group became free or nearly free from the eruption and only three failed to show some sign of improvement. The response of follicular hyperkeratosis and of acne to the administration of vitamin A suggests to Straumfjord that their cause is the same, namely, that both are cutaneous lesions of vitamin A deficiency.

PLASTIC GELS AS SULFONAMIDE VEHICLES

R. Hare and E. M. Clark (*War Med.* 4:140, 1943) realized that many factors must be taken into consideration in the search for a suitable method for the first-aid treatment of persons wounded in battle who may be compelled to lie unattended for days before proper surgical treatment becomes available. They noted that sulfanilamide alone or incorporated in a vehicle leaves much to be desired, for it is absorbed within the first twenty-four hours. Sulfathiazole without a buffer is much more slowly absorbed than sulfanilamide because it is so much less soluble. It also acts on a greater variety of clostridia than sulfanilamide and may even have some action on staphylococci. When the unbuffered drug is employed, an effective potential is maintained for only sixty hours and the formation of crystals is a great drawback. When the drug was incorporated in a plastic material, such as methyl cellulose, the effective concentration was maintained for much longer periods and crystal formation was not observed. Another advantage is its ability to absorb three to eight times its own weight of serum or plasma. This will tend to facilitate soaking up of oozing blood and serum; in this process the vehicle swells, and, if a tight bandage is applied, the pressure exerted by the swelling may prevent further capillary bleeding and may even arrest venous hemorrhage. Because methyl cellulose is not absorbed by plasma or other tissue fluids, primary or even secondary suture cannot be carried out until it has all been removed. However, methyl cellulose is freely soluble in water, and can be picked or washed out at debridement of the wound.

VOMITING IN PREGNANCY

According to an item in *Modern Medicine* (October 1943), B. B. Weinstein and his associates at the Tulane University School of Medicine have found vitamin B_6 a valuable aid in the treatment of nausea and vomiting in pregnancy. With pyridoxine hydrochloride as an adjunct to the usual treatment for these symptoms, partial or complete relief was rapidly obtained in 32 pregnant women. Intramuscular injections of from 50 to 100 mg. of the vitamin were given three times weekly with favorable response resulting after 150 to 1,050 mg. had been given. No toxic effects were noted.

ADRENAL CORTEX FOR PERTUSSIS

The injection of adrenal cortex extract for the amelioration of pertussis symptoms was found by J. Lewis (*Arch. Pediat.* 60:313, 1943) to be more effective during the course of the disease than were injections of pertussis antigen, Sauer's vaccine, an antigen-vaccine mixture or triple typhoid vaccine. Working on the assumption that vomiting, with consequent loss of chloride, might in some manner be responsible for the slow development of immunity in whooping cough, some of the 338 children being studied were given an extract of adrenal cortex. The product employed was prepared from fresh beef adrenal glands and was free of epinephrine and water-soluble toxic contaminants. The results of this therapy made it apparent that coughing, vomiting and whooping were less severe among the children to whom this adrenal cortex extract was given.

TREATMENT FOR SINUSITIS

Back in 1941 it was reported that a 5 per cent solution of sodium sulfathiazole brought greater relief from the symptoms of chronic sinusitis than any preparation previously used. By adding sodium sulfite to the solution, report F. M. Turnbull and his associates (*J.A.M.A.* 123:536, 1943), the preparation was made stable to light, air and heat. A vasoconstrictor was then added to the solution to decrease congestion and thus assisting the antibacterial action of the sulfonamide salt. The vasoconstrictor used, dl-desoxyephedrine hydrochloride, was not only compatible with sodium sulfathiazole, but actually formed a new sulfonamide drug, de-soxyephronium sulfathiazole. Because of the presence of this new compound, the vasoconstrictive action of the solution was so pronounced that only one-eighth of one per cent of desoxyephedrine hydrochloride was required to obtain adequate shrinkage of the acutely congested nasal membranes. Clinical observations on over 1,000

Established 1910

HUISKING

Chemicals, Drugs, Oils

EXPORT · IMPORT Pharmaceutical · Industrial

CAMPHOR U.S.P.
DU PONT

SULFUR PRECIP. U.S.P.
SYLVANIA BRAND

Atropine Sulfate U.S.P.
Beeswax, *White and Yellow*
Brucine, Sulfate and Alkaloid
Ephedrine Alkaloid and Salts
Ergot
Gelatin, *Silver Label*
Gum Tragacanth, *Ribbon, Powder*
Haarlem Oil, *Tilly Brand*
Ichthammol N.F.
Lycopodium
Papain
Spanish Saffron
Sparteine Sulfate N.F.
Tannic Acid U.S.P.

CHAS. L. HUISKING & CO., INC.
155 VARICK STREET, NEW YORK, N. Y.
Chicago Office
561 E. Illinois St.
Cable Address
HUISKING, NEW YORK
LONDON AGENTS: Wheeler & Huisking, Ltd., 26 Great Tower St., London, E.C.3, England

P.D.

PEDER DEVOLD
COD LIVER OIL

Pure · Imported · Standardized Tested Here U.S.P. The Bottler's Standard For Decades

EXPORTERS ADVANTAGEOUSLY SERVED

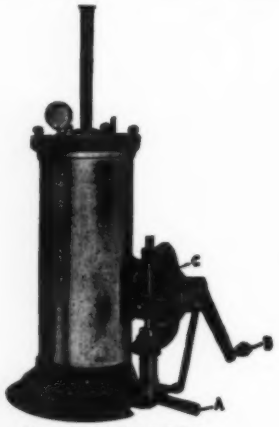
The export of Medicinal Cod Liver Oil from this shipping point to all parts of the world is steadily increasing, favored by the prevailing conditions.
Our large spot stocks of pure tested U.S.P. material of various guaranteed potencies . . . our intimate knowledge of export requirements and the necessary "red tape" . . . our ability to make, if necessary, "24 hour deliveries" and to pack as needed . . . and our uniformly low market prices . . . these factors of "good service" have gained us the confidence of many exporters, Foreign Governmental Purchasing Commissions, and Buying Agents of Foreign Houses.

If it is "Cod Liver Oil for Export" may we suggest that you send your inquiries to us? Of course, we can take care of your domestic requirements equally well.

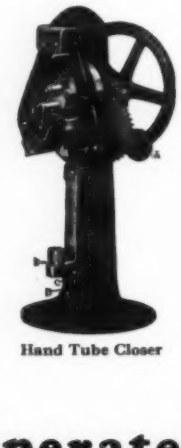
PEDER DEVOLD OIL CO., INC.
155 VARICK STREET, NEW YORK, N. Y.
IMPORT Cable Address: VITAMINE, NEW YORK All Standard Codes EXPORT

SANTONIN
AND ALKALOIDS of AMERICAN MANUFACTURE

SANTONINE COMPANY OF AMERICA, INC.
155 VARICK ST., NEW YORK, N. Y. — Cable Address: SANTONICOS, NEW YORK



No. 3 Hand Paste Filler



Hand Tube Closer

Foot Power Crimper

Colton Hand Operated Machines

No. 3 Collapsible tube filler (hand operated) for tubes up to 1" x 5½" long.

Hand operated tube closer made in two sizes and styles to seal tubes with the Colton Clipless Closure or to seal tubes for applying clips.

Foot operated crimper for applying final corrugation to the closed end of the Colton Clipless Closure which gives it a decorative appearance as well as greater rigidity to the closed end of tube.

We also furnish this same machine without the crimping jaws for applying clips.

Our catalog No. 11 illustrates a variety of fillers and closers to suit production required. Please make us acquainted with your requirements and capacity, and we will be pleased to recommend machines best suited for your purpose.

ARTHUR COLTON COMPANY

2620 East Jefferson Avenue Established 1884 **Detroit, Michigan, U. S. A.**

cases of nose, throat and ear infections, showed that in acute colds, treatment with the new preparation resulted in rather prompt relief and apparent shortening of the duration of the infection. Similar effects were observed in acute sinusitis, with less tendency to become subacute or chronic. In chronic sinusitis, favorable reactions eliminated the need for surgery and there are indications that the use of the improved solution will greatly reduce the number of sinus operations that might otherwise be necessary. Acute suppurative otitis media was a much less frequent complication, and chronic cases that had resisted other forms of treatment cleared up without radical mastoid operation.

FLUORIDES VS TOOTH DECAY

Evidence that the use of fluorides in drinking water may greatly lessen the likelihood of tooth decay was given in reports by H. T. Dean of the United States Public Health Service and R. J. Faust of the Michigan State Department of Public Health.

Speaking before the New York meeting of the American Public Health Association, Dean reported that epidemiological studies by the U. S. P. H. S. show that school children using domestic waters containing as little as one part per million of fluoride experience only half to a third as much dental decay as comparable groups using water containing no fluoride. It was found that the amount of fluorine necessary to stop dental decay is not high enough to cause disfiguring mottled enamel. Hence, Dean believes that far-reaching mass control of dental decay in large population groups begins to loom up as a distinct possibility. However, he warns against haste in adding fluorine to water until careful studies can show the safety of this measure in relation to other aspects of community health.

Considering the practical engineering phases, Faust stated that adding fluorine to water supplies should not prove difficult or expensive. This could be done with chemical feeding equipment of the type already in use and familiar to water plant operators. The cost of such treatment per person per year would be about seven and one-half cents.—*Science*—Supplement Nov. 5, 1943.

WARTIME TREATMENT OF SCABIES

Scabies increases in wartime. Hence the revival by M. Oppenheim and H. A. Smith of a "sure, fast, agreeable and cheap" method used on thousands of cases during and after World War I. The method, as described in the *Archives of Dermatology and Syphilology* (48:370, 1943), is carried out as follows: The patient's body is rubbed for fifteen minutes with green soap and wood wool, chiefly by the patient himself. Special attention is given to the favorite sites of scabies. The head and scalp are not treated. The patient is put into a warm bath (30° C.) and is rubbed again with green soap, this time for half an hour, with a brush or wood wool. Then the patient is taken from the bath tub, dried carefully and smeared with the following ointment:

Precipitated sulfur	25 Gm.
Potassium carbonate	10 Gm.
Yellow petrolatum	125 Gm.

When applying the ointment the areas of the burrows are rubbed especially carefully. The hands are covered by gloves and the feet by socks, and the patient is rolled in a sheet and covered with a woolen blanket. After two hours the patient is put under a shower, where the ointment is removed by soaping with a common soap. He is dried carefully and his entire body except the head and neck smeared with zinc paste (30 Gm. each of zinc oxide and purified talc and 60 Gm. of yellow petrolatum).

The entire treatment takes three hours. Moderate itching remains for a few days. During the treatment, shirts, underwear, socks, gloves and shoes are sterilized by hot air. Patients with serious eczema or impetigo staphylogenes, old persons, children under 6 years, patients seriously sick and pregnant women after the middle of the term of pregnancy are not given the quick treatment.

PENICILLIN STERILITY TEST

Despite its specificity against many pathogenic bacteria, penicillin itself may be contaminated by other microorganisms. Since this agent can be administered only parenterally or applied topically it is essential that the penicillin be entirely sterile. However, ordinary tests for sterility are not applicable to this agent. The approach used in developing a satisfactory method for testing penicillin for sterility, according to C. A. Lawrence (*Science* 98:413, 1943), involves a consideration of some chemical or physical agent which would inactivate the penicillin completely and yet in itself have no antibacterial effects on possible contaminating organisms in the product.

Clarase, an active deastatic enzyme system, appeared to meet the necessary requirements. These enzymes were found to inactivate the antibacterial effects of penicillin in two hours or less when incubated in the presence of the agent. With this information, Lawrence proposed the following method for routine sterility tests on penicillin powder. A stock of one per cent sterile solution of Clarase in phosphate buffer, pH 7.0, is distributed in sterile cotton plugged test tubes or in ampoules which may be sealed. The contents of an ampoule of penicillin are dissolved or suspended in 2 cc. of prepared Clarase solution and transferred immediately to tubes of Brewers' fluid thioglycollate medium. The inoculated tubes are placed at 37° C. and examined for possible bacterial contamination throughout a period of seven days. An additional seven days should be allowed for detection of possible mold contamination.

LOCAL TOXIC EFFECTS OF SULFAS

In a paper published in the *Archives of Ophthalmology* (30:65, 1943), J. G. Bellows reports the results of investigations of the effects of local application of the sulfonamide drugs on the eyeball. The corneas of young adult rabbits were anesthetized by means of a 4 per cent cocaine hydrochloride solution, which was chosen not only for its anesthetic properties but for its drying effect on the epithelium. The drying effect was desired because it facilitated removal of the epithelium. The cornea was stained with fluorescein to make certain that the epithelium was completely removed. Sulfanilamide, sulfathiazole, sulfapyridine and sulfadiazine were used in the form of powder, a 5 per cent ointment and a 20 per cent suspension. The drug to be tested was applied three times daily to one eye, while the other eye served as a control. These experiments yielded additional support to the contention that the sulfonamide compounds have an unfavorable effect on actively growing epithelium as shown by a greater than twofold increase in the time required for epithelial regeneration. They increase the amount of scarring. Therefore the local use of these drugs should be avoided in the treatment of injuries of the face or cornea.

ALKALOIDS

GLUCOSIDES---DRUG EXTRACTIVES

As in **WORLD WAR I**

Now in **WORLD WAR II**

ACONITINE
ARECOLINE
ASPIDOSPERMINE
ATROPINE
BERBERINE
CHRYSAROBIN
COLCHICINE
DIGITALIN
EPHEDRINE
ESERINE
HOMATROPINE
HYDRASTINE
HYOSCINE
HYOSCYAMINE
LOBELINE
PICROTOXIN
PILOCARPINE
SANGUINARINE
SPARTEINE
STROPHANTHIN
YOHIMBINE

INLAND ALKALOID CO.

MANUFACTURING CHEMISTS

TIPTON INDIANA U.S.A.

IMPORT EXPORT

H. H. ROSENTHAL CO.

1943

DRUGS · CHEMICALS · OILS · WAXES

25 YEARS OF SERVICE

NEW YORK U.S.A.

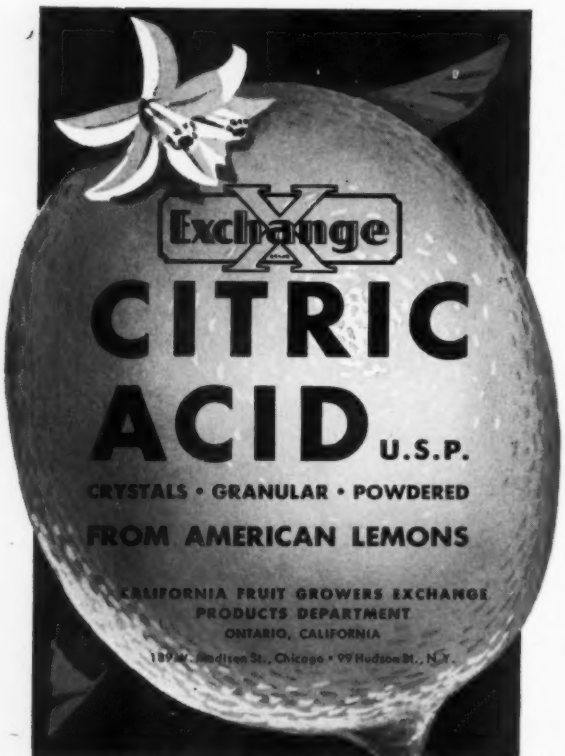
FINE CHEMICALS
GUMS OILS
WAXES

FINEST MEDICINAL COD LIVER OIL
GUARANTEED U.S.P.

H. H. ROSENTHAL CO.

25 EAST 26th ST. NEW YORK, N. Y.

Tel. AShland 4-7500



Copyright 1942 California Fruit Growers Exchange, Products Dept.

Use LABELS AND SEALS

FAITHFUL by SERVICE

JOHN HORN

837-839 TENTH AVENUE

NEW YORK N.Y.

FOR OVER FIFTY YEARS

for greater sales appeal

METAL · EMBOSSED
ENGRAVED
DIE STAMPING FOR BOXMAKERS

PURCHASING DEPARTMENT

NOVEMBER MOVEMENTS

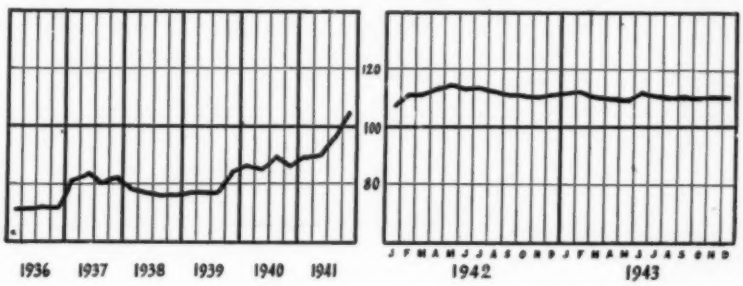
Up

Aconite root 5c	Cedar leaf oil 5c	Nutmeg oil $1
Almond oil, sweet 5c	Cedar wood oil 5c	Patchouli oil 50c
Anise oil 10c	Citronella oil, Ceylon 5c	Rhubarb root HD 25c
Birch oil, Southern 75c	Dill oil, weed 35c	Saffron American 16c
Sweet, Northern 15c	Erigeron 15c	Spanish $7
Bois de Rose Braz. 75c	Henbane leaves 5c	Sassafras oil 50c
Calamus oil $1.50	Horehound herb 1c	Tansy oil 25c
Caraway oil 50c	Linaloe oil, Mexican 10c	
Cascara 2c	Mace oil, dist. $1	

Down

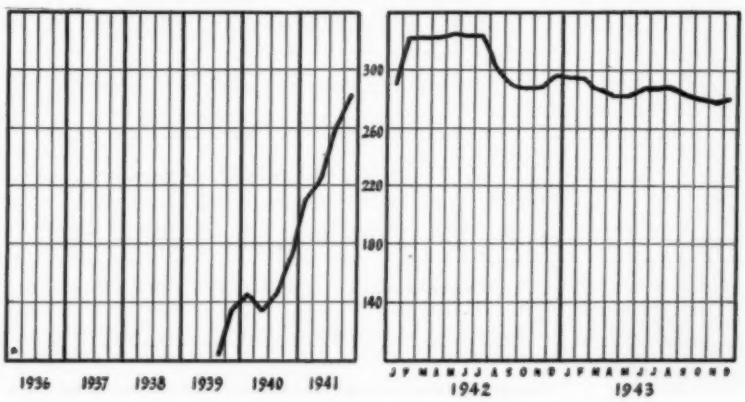
Belladonna leaves 20c	Burdock root 1c	Lycopodium $1
Buckthorn bark 4c	Chamomile flowers, Hung. 2c	Papain 15c

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index remained without change at 113.2. Menthol importers still showed considerable interest in Brazilian material. Several factors have gone to South America to personally investigate possibilities. As yet importations from that source have been insufficient to affect the spot supply position which continued, during the current trading period, virtually devoid of material.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index advanced to 283.9 from the previous 282.1. Belladonna was lower at $1 a pound; cascara rose two cents to 31 cents a pound; rhubarb advanced to $1.40. Stocks of most botanicals have been steadily decreasing in the local market and the prospects of getting replacements of either domestic or imported materials have not shown any improvement of late.

R. GESELL
INCORPORATED

Manufacturing
Chemists

★

Specializing In Private
Formula Work

★

200 HOUSTON ST.
NEW YORK, N. Y.

ABBOTT *Quality* DRUGS
AND CHEMICALS . . . .

ANESTHETICS
Procaine Hydrochloride . . . Procaine Base . . .
Benzocaine . . . Procaine Borate . . . Butyl p-aminobenzoate

ANTISEPTICS
Acriflavine Hydrochloride . . . Acriflavine Neutral

HYPNOTICS
Phenobarbital . . . Phenobarbital Sodium

ALKALOIDS AND DRUG EXTRACTIVES
Ephedrine . . . Lobeline Sulfate . . . Podophyllin

For Quotations Address:
CHEMICAL SALES DEPARTMENT

ABBOTT LABORATORIES, North Chicago, Ill.

GUMS

WHOLE & POWDERED

TRAGACANTH
LOCUST BEAN
KARAYA (INDIAN GUM)
ARABIC

FRANK-VLIET CO., Inc.
IMPORTERS — MILLERS
160 WATER STREET NEW YORK, N. Y.
Telephone BOwling Green 9-4363-4364

1001 Chestnut St. Philadelphia, Pa.
912 East Third St. Los Angeles, Cal.
BRANCH OFFICES
389 St. Paul St., W. Montreal, Canada
206 State St. Boston, Mass.
383 Brannan St. San Francisco, Cal.

ALGALOID

PURE EXTRACT OF IRISH MOSS

A POTENT, NATURAL, GELLING AGENT
AND EMULSIFIER
COMPLETELY SOLUBLE --- NEUTRAL

●

IRISH MOSS

HIGHEST QUALITY - FULLY CLEANED
CRUDE --- POWDERED

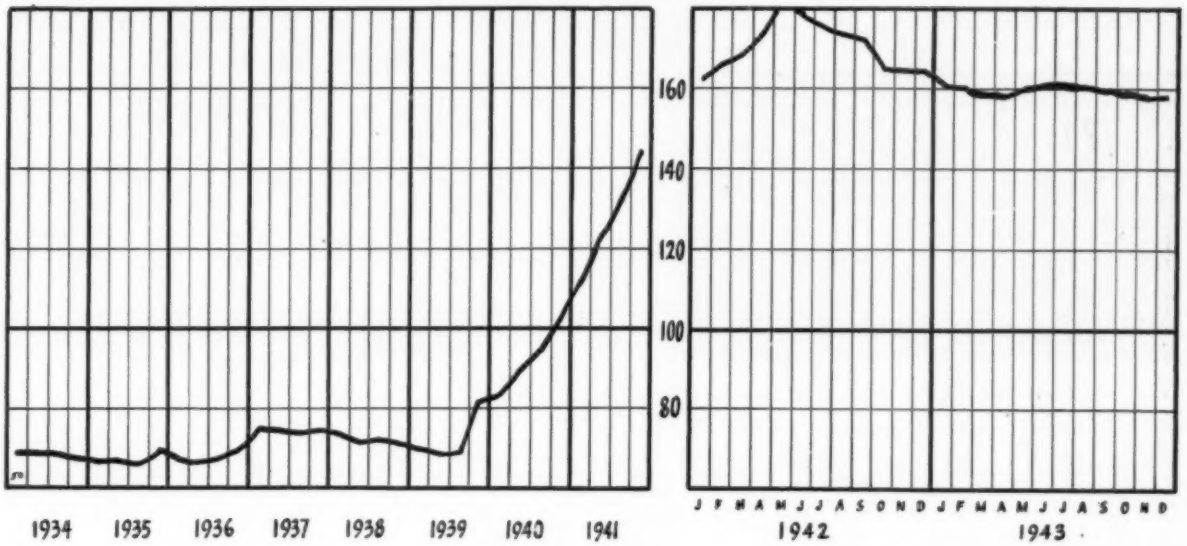
GRADED AND PREPARED BY

T. M. DUCHÉ & SONS, INC.

117-119 HUDSON ST., NEW YORK 13

BOSTON 177 State
CHICAGO 61 W. Kinzie
CLEVELAND 419 Eagle Ave.
ST. LOUIS 2115 Pine

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for November, 1943, advanced to 158.6 from the previous 158.1. The overall demand for medicinal chemicals, botanicals, essential oils, and cosmetic raw materials continued active during the current trading period. Practically all materials of natural origin continued in light supply with the result that the market retained the firm tone which has been the feature of late.

• Prices quoted in this section were current on the first of this month.

MENTHOL

"We have read with considerable interest the article which appeared on page 394 of your October issue, entitled "Brazilian Menthol," and wish to point out a few inconsistencies and misstatements of fact which appeared therein.

"You state that 'about 1,700 alqueries are being planted to mint' and explain that an alquerie is .02471 acre, or about one-fortieth of an acre. You then state that the average yield is 200 kilos of oil per alquerie, which would mean about 8,000 kilos or 17,600 pounds of oil per acre.

"Now, Parry states that Japanese peppermint gives from one-half to one per cent of oil, and Gildemeister reports 0.8 per cent. Even if the plant were to give a yield as high as two per cent of oil on distillation (and this is a very good yield, indeed), we would have about 880,000 pounds of peppermint growing on a single acre! If the Brazilians have accomplished such miracles, the American farmers would certainly like to know how this is done.

"Actually, the source of the error lies in the meaning of the term 'alquerie.' This is a term which, according to Brazilian sources in New York, is not in current usage in Brazil, and is probably used nowhere except in the Azores. Webster's Merriam dictionary, a rather authoritative source, gives us the spelling 'alqueire' and defines the term as being equal to '242 or 484 ares' and the are, in turn, is equal to 0.02471 acres. Translated into familiar terms, this would make the "alquerie" equal to either about six or about 12 acres.

"Rewriting your little story with correct mathematics, it would appear that about 300 acres, more or less, has been planted, the average yield of oil is about 30 kilos per acre, a total production of about 9,000 kilos or less than 20,000 pounds of oil. If an 80% yield of menthol were obtained, this would leave the American market with about 16,000 lbs. of Brazilian menthol U.S.P., which is not quite the same as the 598,400 pounds which you mention.

"Frankly, we do not know if these figures are correct. It is difficult to obtain accurate information, and we ourselves have been led to believe that an amount of menthol more interesting than 16,000 pounds but not as fantastic as 598,000 pounds would arrive from Brazil. Perhaps the truth lies somewhere in between. But we are afraid it is not to be found in the little article you published."

Signed: Interested Reader

Editor's Note: Our figures were based on 1,700 alqueries planted to peppermint and a yield of 200 kilos of oil alquerie. We acknowledge our error in stating an alquerie equalled .02471 acre, but this error does not in any way change the figures given in the article. The above letter is interesting, however, in that it confirms our expressed opinion that this market is still lacking definite information regarding Brazilian production of menthol.

DRUG PLANTS

To meet present Allied needs for drug plants, and at the same time to aid agricultural diversification, a United States Government mission, headed by Dr. William H. Bonisteel, botanist and former professor at Fordham University, is collaborating with the Mexican Government in establishing in Mexico

MYSORE GOVERNMENT
Sandalwood
~~ Oil ~~

Distilled from
Santalum Album

INSIST ON ORIGINAL CANS AND CASES

Sole Agents for the United States
In Canada: *Sole Agents*
W. J. BUSH & CO. (*Canada*) Ltd. Montreal

W. J. BUSH & CO.
(Incorporated)
Essential Oils
New York
Chicago National City, Calif. Montreal

BILE SALTS
CHOLESTERIN
IRON PEPTONATE

THE WILSON LABORATORIES

4221 So. Western Ave., Chicago, Ill.

also

816 First Ave., New York
Drexel Bldg., Philadelphia
869 Folsom St., San Francisco
1608 E. 15th St., Los Angeles
619 Clark Ave., St. Louis

CHRYSTAL

FOR

COSMETIC

RAW MATERIALS

KAOLIN
TALC
BENTONITE
OZOKERITE

CHARLES B. CHRYSTAL CBC MINERALS, CLAYS, COLORS 1897 NEW YORK

CHALK
CLAY
FULLERS EARTH
BEESWAX

CHAS. B. CHRYSTAL CO., INC.
18 HUDSON STREET, NEW YORK, N Y.
Warehouse and Mills — JERSEY CITY, N. J.

Pharmaceuticals

CALCIUM LEVULINATE

Calcium Iodobehenate, U.S.P.

Tannigen U.S.P. • Tannalbin U.S.P.

Calcium Camphosulphonate and other salts

Antipyrine Salicylate (pure)

Helmitol • Phenetsal

ALSO: Special products manufactured with your confidential process or with processes developed by us for you.

Write for comprehensive list of organic chemicals of our manufacture. Consult us on your special requirements.

FINE ORGANICS, INC.
Manufacturing Chemists
Executive Office: 211 East 19th St., New York 3, N. Y.
Gramercy 5-1030

and Lower California agricultural stations, where the cultivation of various drug plants is under experiment. Already 10 stations have been established.

The United States has supplied the seed; the Mexican Department of Agriculture has taken an active interest; large and small landowners, including Gen. Abelardo L. Rodriguez, former President of Mexico, have donated land and labor.

One of the essential drugs is red squill. It is a powerful poison that does not harm human beings or domestic animals but is fatal to rats. Normally United States supplies come from the bulb of a plant that grows on the Mediterranean shores. The present supply is short, and yet rodent depredations of wartime food must be reduced.

Pyrethrum, derris, belladonna, henbane, stramonium, peppermint, and senna are among the drugs undergoing experimental plantings. Most of these have been planted at the new agricultural stations in Mexico. All are expected to be in commercial production next Fall.

PEPPERMINT OIL

Users of peppermint oil soon will be informed by the War Food Administration of the quantities they may expect to obtain during the next year, so they may plan their operations more definitely, according to the administrator of FDO 81, which covers peppermint oil.

This will come in the form of an amendment to FDO 81 which is expected to provide somewhat more liberal allocations of peppermint oil for use in tooth paste, candy, medicines and other products. It is expected that allocations will be made on the basis of a definite percentage of 1941 uses.

LANOLIN

The War Food Administration's hope that some lanolin would be available for allocation to manufacturers of cosmetics, soaps and shaving cream during December has not materialized and requests for these uses will be denied for the month, it was reported. The "hope" consequently, is being transferred to January, but at present there is no firm indication what the situation will be then.

Instead of easing in November, as had been hoped for, the lanolin situation tightened so that even small users, exempt from the provisions of FDA 76, which governs lanolin, were denied supplies. The order exempts users of up to 10 pounds monthly. It is expected that small quantities will be made available to exempt users—primarily drug stores for prescription purposes—during December, it was said, but it will not be possible to allow each exempt user the full 10 pounds.

VITAMINS

Various vitamins were reduced by producers during the current trading period. The following schedules now prevail: Thiamine hydrochloride USP XII, 1 gram bottle $ .375 per gram; 50 gram bottle $ .295 per gram. Riboflavin USP 1 gram 53c, 5 grams 46c per gram. Niacin USP XII, 50 ko. drum $9 per kilo; 10 ko. drum $9.10 per kilo. Vitamin B_6 Hydrochloride, 50 gram bottle $64, 10 gram bottle $12.80. Nicotinamide, 50 ko. drum $13.25 per kilo, 1 ko. drum $13.55 per kilo.

GLYCERIN

Additional quantities of glycerin will be available to manufacturers for December use, the War Food Administration has announced. For the December allocation period, glycerin users are divided into two groups. The first group, manufacturers of military and essential civilian products, will get 100 per cent of their December requirements. The second group, manufacturers of less essential products, will get 100 per cent of the average monthly quantity used during 1940.

All applicants, however, will get up to 1,150 pounds of glycerin, for the two classes of uses, regardless of the quantity used in 1940. This is a new allocation policy, the FDA said, and will increase the supplies available to hundreds of small users who heretofore could get only fixed percentages of the quantity used in 1940, often much less than 1,150 pounds.

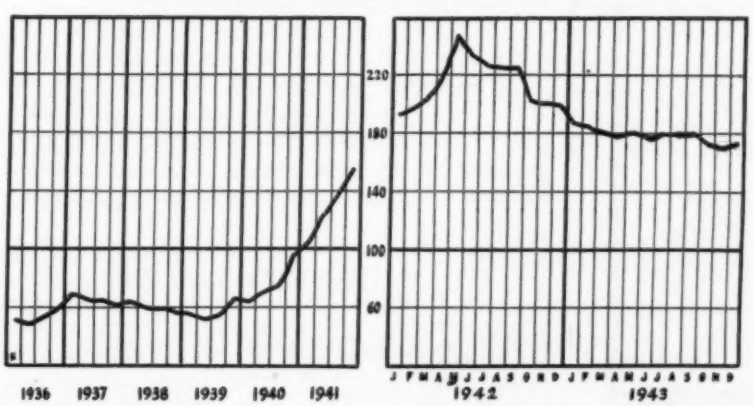
Manufacturers of the following products will get 100 per cent of their December glycerin requirements:—drugs, pharmaceuticals and medical supplies.

Manufacturers of these products will get 100 per cent of their requirements, based on the average monthly use in 1940:—cosmetics, toilet preparations, dentifrices, and shaving preparations.

CASCARA

A generally high-quality harvest and improved collection methods cause authorities to believe that the cascara bark harvest on Vancouver Island will reach an unprecedented high this season. The cascara bark crop in British Columbia amounted to 300 tons last year and was valued at $150,000, states a Canadian trade journal.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oil index advanced to 182.1 from the previous 181.0. Anise rose to $3.60 a pound; Bois de Rose was up to $5.50 a pound; and citronella advanced 5 cents to $1. Practically all oils continued in light supply, with sellers in most instances unable to fill orders or compelled to reduce quantities of materials requested.

FOUNDED T & B 1856

"Look for the Symbol of Standardization"

GUMS

For over 75 years the recognized source of supply

Arabic

Tragacanth

Karaya

All powdered gums standardized by Laboratory Control

THURSTON & BRAIDICH
286 Spring Street **New York**
Represented in Chicago by A. C. Drury & Co., Inc.

BL

A DEPENDABLE SOURCE OF SUPPLY FOR
Pure Choline Derivatives*

CHOLINE CHLORIDE
Crystal or 75% Solution
CHOLINE BROMIDE BROMOCHOLINE BROMIDE
ACETYLCHOLINE BROMIDE
ACETYLCHOLINE CHLORIDE
A product of exceptionally high purity — assaying around 99.9%, with a hydrolysis of less than 0.5%.
ACETYLCHOLINE IODIDE
A highly purified product with practically the same therapeutic properties as Acetylcholine Chloride, but being nonhygroscopic and stable in air and water, it offers the advantage of controlled therapeutic action.
ACETYL-BETA-METHYLCHOLINE BROMIDE, CHLORIDE AND IODIDE

*Offered for manufacturing and investigational purposes only

B. L. LEMKE CO.
MANUFACTURING CHEMISTS
250 WEST BROADWAY • NEW YORK 13, N. Y.

Replacing
Glyceryl Monostearate

CERASYNT M will replace glyceryl monostearate wherever the latter is now being used, without necessitating any other changes in formulation. Its great stability, which exceeds that of glyceryl monostearate, is an outstanding feature of Cerasynt M. Not self-emulsifying.

Sample and price upon request

VAN DYK & COMPANY
INCORPORATED 1904
Manufacturers of Perfumery and Cosmetic Raw Material since 1901
OFFICES, WORKS, AND LABORATORIES
57 Wilkinson Ave., Jersey City, N. J.
Los Angeles: 1282 Sunset Blvd.

THE UNITED STATES DISPENSATORY

EDITED BY HORATIO C. WOOD, JR., ARTHUR OSOL, HEBER W. YOUNGKEN, LOUIS GERSHENFELD

NEW 23rd EDITION
JUST OUT

BASED on the U.S.P. XII and the N.F. VII and containing every drug and preparation in both, the *new* U.S.D. offers you the information you need *for daily use* between the covers of one book. The tremendous advances made in the field during the past five years mean that earlier editions simply will no longer serve.

$15.00 Postpaid

DRUG & COSMETIC INDUSTRY
Book Dept.
101 West 31st Street New York 1, N.Y.

VANILLA

The Mexican 1943 vanilla-bean crop is estimated at about 200,000 pounds of cured beans.

The producing capacity of the vanilla district in Mexico is reported to be much above the prospective harvest. Unfavorable weather in the past 3 years has been the cause of small crops.

Mexican vanilla producers expected a decline in 1940, but a favorable growing season and forcing of the vines resulted in a crop of 465,325 pounds. The forcing in 1940, together with adverse weather in 1941, resulted in production of only 116,784 pounds in that year. The 1942 crop was estimated at 176,485 pounds.

Because of extremely dry conditions this year vanilla beans were expected to ripen almost a month earlier than during normal years. The official opening date of the harvest is November 15, but dealers have requested officials of the Government to have the date changed to October 15.

Practically the entire crop of vanilla beans is exported.

CASTOR OIL

Castor-bean production for 1943 in Brazil has been estimated at 250,000 tons, 55 per cent greater than that of 1937.

The greatest increase in production over the 1937 yield are expected in the States of Sao Paulo and Parana. In fact, a rise is anticipated in every Brazilian State with the exception of Ceara, which will have an 8 per cent decline, and Minas Gerais, where production is thought to be the same as it was 6 years ago.

The State of Sao Paulo will probably produce 70,000 tons, or 28 per cent of the 1943 castor-bean total; Bahia, 60,000, or 24 per cent; and Pernambuco, 40,000 tons, or 16 per cent.

Early improvement in the quality of numerous civilian products was made possible by the War Food Administration's relaxation of restrictions on the use and delivery of castor oil. Castor oil has been confined to military and essential uses since last January because supplies were inadequate to meet all needs. Inventories now have risen from an all-time low early this year to a satisfactory level at present, and prospects, in view of improved shipping conditions, are for an increasing volume.

CINCHONA

After Java fell into Axis hands, the Allies decided to conduct research regarding the fitness of British East Africa as a source of quinine. To work all the possibilities most effectively, an organization in that country was created to act as a permanent production center for all the British African colonies, and financial assistance toward the research was given through the Colonies Welfare and Development Fund.

Greatest potential sources of cinchona within the British African domains are Nigeria in West Africa and Kenya, Uganda, and Tanganyika in East Africa.

When the East Indies fell, meager supplies of cinchona seed of an extremely virile type were flown to Australia, and some of these are now in East Africa.

A new, accelerated method of cinchona growing, originated by the Russians, may be used in the African set-up. Instead of waiting 3 or 4 years, and sometimes 7, for thinning and pruning as has been customary in the past, Soviet workmen grow the cinchona close together and then harvest the entire plant when it is 1 or 2 years old. Because of differences in climate, some changes in this plan may be necessary in Africa.

MERCURY

Some fairly substantial business was done in mercury during the current trading period out of spot stocks and it was consummated on the basis of $195 a flask. The favorable position of the national stockpile of this metal is shown by a War Production Board order which cuts back domestic production and importations of mercury for 1944 for both private and government purchase to approximately 70 per cent of the 1943 amount.

While there is practically no long-range buying of mercury on the Pacific Coast, nevertheless there were reports of some improved purchasing for the spot and nearby. Possibly this was influenced by the knowledge that Winter will bring along some decrease in production.

AGAR

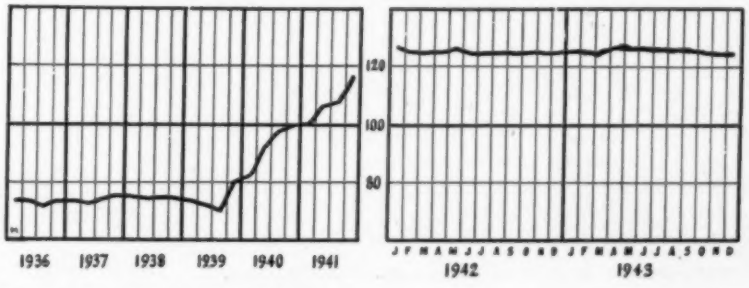
Local supplies of agar are practically nil. Most of the Pacific coast production is being confined to bacteriological use and does not reach the East. There are reports of production along the Carolina coast but no shipments have as yet reached this market. Production in Africa may ease lend-lease demands shortly but no Atlantic shipments are likely.

BOIS DE ROSE

Further reductions in the supply of this oil resulted in an advance in prices of at least 25c per pound and caused some holders of spot stocks to withdraw offerings from the market. Recent sales below 85 per pound could not be duplicated during late trading. Export licenses for shipment from Brazil were unavailable, resulting in a stronger local market, although it is reported that sufficient stocks are held in primary centers.

The medicinal chemicals index remained unchanged at 125.6. Two major problems continued to plague manufacturers, namely manpower and crude material shortages. In some instances the former is proving the more difficult of the two. With 300,000 additional men scheduled for draft call in January the solution to the labor problem is nowhere in sight.

15 Medicinal Chemicals—Weighted Price Index 1926=100.



R.W. Greeff & Co. Inc. New York, U.S.A.

INDUSTRIAL AND PHARMACEUTICAL *Chemicals*

ULTRA-VIOLET FILTERS

for sunburn preventive creams and lotions

Oil and Water Soluble

R.W. GREEFF & CO.

10 ROCKEFELLER PLAZA NEW YORK CITY

TRIBUNE TOWER CHICAGO, ILL.

QUALITY RAW MATERIALS

Our complete stocks guarantee that you can obtain the exact grade and quality for your requirements without delay.

BEESWAX, sunbleached and yellow Refined U.S.P.

TRAGACANTH GUM, all grades

KARAYA GUM, all grades

STEARIC ACID, fancy triple pressed

QUINCE SEED, Persian, recleaned

also

SPERMACETI WAX CERESIN WAX

CAMPHOR

and all other cosmetic raw materials. Samples on request.

Write for latest stock list

WALTER H. JELLY & CO.

INCORPORATED

412 N. Western Avenue Chicago, Illinois

READERS'

HAIR DYE STAINS: As a subscriber to your review for years and always a reader of the Compounder's Corner, I will appreciate it if you could send me a few formulas for a product that removes hair dues from the skin after a hair dye application. Thanks in advance. Montreal.

As yet, there is no remover applicable for all types of dyes, since dyes vary in their chemical composition and mode of action. One simple and effective method for removing many dye stains consists of the use of hydrogen peroxide, which must be applied cautiously if used in higher strength. Other preparations which have been employed from time to time for this purpose are quite toxic and their use is not to be recommended.

The best method is avoiding the staining of the skin during the dyeing of the hair. A simple protective measure is the application of soft petrolatum to the areas requiring protection; avoiding contact between the greasy material and the hair.

LIQUID ANTACID PREPARATIONS: We are looking for a formula, preferably a liquid or jelly with the ingredients in suspension, for an upset stomach due to overeating or drinking, or both. Can you suggest a formula? Or, have you had any articles in THE DRUG AND COSMETIC INDUSTRY *Magazine on the subject? We read your articles with a great deal of interest, but do not remember of seeing one on the subject named above. We will appreciate a reply. Cleveland.*

Antacids are widely used for this purpose and a rather complete discussion on the use of modern antacids appeared in THE DRUG AND COSMETIC INDUSTRY for December 1938, page 673. The present tendency is, of course, to use powders or tablets containing magnesium trisilicate or colloidal aluminum hydroxide. However, a liquid antacid preparation can be made, according to the "Pharmaceutical Recipe Book," Third Edition, as follows:

Antacid Mixture (N.Y.H.F.)

Magnesium Sulfate	125 Gm.
Magnesium Carbonate	65 Gm.
Aromatic Spirit or Ammonia	60 cc.
Distilled Water, a sufficient quantity to make,	1000 cc.

Dissolve the magnesium sulfate in 500 cc. of distilled water, Triturate the magnesium carbonate with this solution until a smooth mixture is obtained. Add the aromatic spirit of ammonia and finally sufficient distilled water to make the product measure 1000 cc. Average dose—Metric, 4cc.—Apothecaries, 1 fluidrachm.

CHILLING LIQUID PREPARATIONS: We would like to call on your Question and Answer department for a suggestion on chilling hair tonics and toilet water. We would like some practical inexpensive method for chilling from fifty to one

QUESTIONS

hundred gallon batches before filtering. Any suggestion you can offer will be appreciated. Dallas.

A method which we have been told is quite inexpensive and efficient consists in suspending a container (preferably of thin-walled metal) filled with cracked ice or dry ice in the liquid to be cooled. The use of a mechanical stirrer will hasten cooling, but this is not absolutely necessary.

STAINLESS OINTMENT BASE: We would like to know if you can recommend a formula for a good stainless, greaseless ointment base? Valparaiso, Indiana.

The following is a typical "washable" ointment base that should meet your requirements.

Cetyl alcohol	15.0
White wax	1.0
Propylene glycol or glycerine	10.0
Sodium lauryl sulfate	2.0
Water	72.0

Procedure:—Melt the alcohol and wax, mix with the propylene glycol, and heat to 65°. Dissolve the sodium lauryl sulfate in water and heat to 65°. Add the oil phase slowly to the water phase with continuous stirring until congealed.

ANTISEPTIC BABY OIL: Can you supply us with a suggested formula for an antiseptic baby oil? Chicago.

As a formula for antiseptic baby oil we offer you the following:

White mineral oil (65-75)	45.0%
Refined peanut oil	54.7
Oxyquinoline benzoate	0.2
Maleic anhydride	0.1
	100.0%

The maleic anhydride and the oxyquinoline benzoate are dissolved in the peanut oil and the mineral oil is added. Preparation is then filtered. While there is still some discussion as to the effectiveness of the test for oil-soluble antiseptics, those who have worked with oxyquinoline benzoate have testified to its effectiveness. Also, we would suggest the following three formulas, bearing in mind that an oil-soluble antiseptic must be added in the proper proportions:

Mineral oil	80.0%
Sesame oil	20.0
Mineral oil	90.0%
Lanolin	3.0
Ethyl stearate	7.0
Mineral oil	97.0%
Cetyl alcohol	3.0

OPACIFYING CLEAR OINTMENTS: We have a clear deodorant ointment which we would like to make opaque and white. We have tried chalk but a reaction occurred. Can you suggest some material which would give us a white ointment? New York City.

A small proportion of titanium dioxide added to your ointment base should give the white opacity that you require.

IT'S the double discharge conveyor of the *WORLD Automatic High Production BEE-LINE Straightaway Labeler*—and what it means to BEE-LINE users is that *no* operator is needed at this point. The bottles are automatically separated into the two lines. What's more the bottles are automatically positioned so that the labels face the packers on each side of the table. Fast, steady handling at low cost is the result of this exclusive WORLD feature.

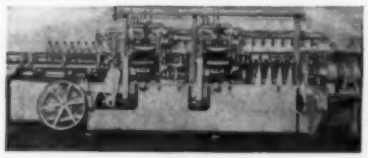
Other important WORLD advantages include:
BEE-LINE movement of the containers through the Labeler. No stops, detours or pile-ups. Ideal for light weight glass containers of every size and shape.

Positive automatic infeed, automatically timing and spacing each container which is gently but firmly conducted through the entire operation.

Clean, smooth, firm label application through patented sliding picker mechanism and two separate pressure wiping operations.

WORLD BEE-LINES are available to manufacturers with proper priority authorization and World's knowledge and experience is available to anyone who has a problem of Labeler conversion, operation or maintenance.

WORLD LABELERS



ECONOMIC MACHINERY CO.

WORCESTER, MASSACHUSETTS

Basic materials for Drugs and Cosmetics

■ One of the many essential services to the drug and cosmetic industries rendered by the House of McKesson for more than a century is the importing and distributing of basic drug materials from all parts of the world. Improved, perfected and extended, this important service to the industry is now used by scores of manufacturers to help produce drug and cosmetic preparations which satisfy the exacting needs of millions of consumers. Inquiries welcomed.

Agents and Distributors for:

Solvay Sales Corporation—*Alkali-Chlorine, Paradichlorobenzene*
E. I. Du Pont de Nemours, Inc.—*Camphor, USP, XI*
Carus Chemical Co.—*Benzoic Acid, Soda Benzoate*
Brown Company—*Chloroform*
Hawaiian Pineapple Co.—*Citric Acid*
Zinsser & Co.—*Gallic Acid, Tannic Acid*
Stauffer Chemical Co.—*Cream Tartar, Tartaric Acid*
British Cod Liver Oil Producers—*Cod Liver Oil*

INDUSTRIAL CHEMICAL DIVISION
McKESSON & ROBBINS, Inc.
155 E. 44th Street, New York, N. Y.

WAXES
SPOT DELIVERY
Quality D&T Brand
SPECIAL LIGHT
AMERICAN DOUBLE REFINED
CANDELILLA
CARNAUBA SUBSTITUTES
WAX COMPOUNDS
DOMESTIC
OZOKERITES
WHITE AND YELLOW
For Samples and Quotations
Write, Wire, or Phone
Write for Bulletin DCI-12
DISTRIBUTING & TRADING CO.
444 MADISON AVENUE — NEW YORK

We would suggest that you check the compatibility of titanium dioxide with your other ointment components for a period of a week or so, in order to make certain that the titanium dioxide is fully compatible with the other ingredients.

SHELLAC SUBSTITUTE: We take the liberty to ask whether you know of any substitute for shellac? The substitute should be soluble in water. New York City.

Shellac is itself not water soluble, but can be dispersed in aqueous media. Therefore, a good substitute might be found among one of the several dispersable synthetic resins (e.g. alkyd resins), which are now being widely used to form the basis of modern emulsified paints. Gelatin under certain circumstances has also been suggested as a substitute for shellac.

ROSIN DEPILATORY: I have been having trouble with a depilatory of the rosin type. It will not harden after it is applied on the arms. Your help would be appreciated. Oak Park, Ill.

Since you do not give the composition of your preparation, we cannot be very specific. However, from the consideration of the formulation of such products, we would assume that you have too high a quantity of plasticizing agent, (e.g. mineral oil) in which case it might be advisable to reduce the proportion of the plasticizer. It is also quite possible that the waxes used in conjunction with the rosin may be at fault and that they may not be of the same grade as those previously used.

COLOR IN TABLETS: Can you give me information as to how I can incorporate color in an uncoated tablet? Can you tell me what type of colors to use? Brooklyn.

Dry color can be added to the dry ingredients and thoroughly mixed. Only certified FDA colors should be used in medicinal tablets. Suppliers of such colors are listed in the advertising pages of this magazine. These suppliers are very helpful and will be able to give you a color preparation most suited to your type of product.

REACTION OF SHAVING CREAMS: In your experience is the pH of shaving cream important? If so, in what respect? Do oils bleached in the creams after a period of time again acquire their original color? Should oils be bleached before they are saponified? St. Louis.

Because excess alkalinity may cause irritation on the face, the pH of the soap should be as near to the neutral as possible. Regarding your second question, it is common practice in soap making to bleach oils before saponification. Oils used in creams may discolor after a time, depending upon such factors as the type of oil used, the perfume employed, or the conditions of storage. However, many of these factors which cause discoloration can be eliminated by selection of proper ingredients plus the use of preservatives or anti-rancidity additions. The return of color may or may not be the same as the original, depending upon the factors mentioned above.

Drug Supplies After Two Years of War

(*Continued from page 636*)

products and in numerous instances their replacement by more acceptable active principles in concentrated form.

Worthy of mention also may be noted the definitions included in the Twelfth Edition of the United States Pharmacopoeia defining:

1. A container.
2. The closure of a container.
3. What a container should do.
4. A well-closed container.
5. A tight container.
6. A hermetic container.
7. A light resistant container.

PACKAGING MATERIALS, CONTAINERS, ETC.

As tightness grew in tin, metals, plastics, and various materials commonly used for containers, packages, and closures, there came a search for substitute materials and with it grew a race of development in the application of wood pulp, laminated paper, and cellulosic materials galore. Specialized paper products required by the War Procurement resulted from intensive and cooperative research; such as we see in the V-board containers for food and other supplies that are dumped overboard from landing vessels and washed ashore, or M.V.P. (moisture vapor proof) wrapping papers for numerous containers for dehydrated foods and other uses: waterproof maps, gasoline bags, paper parachutes, shell containers, multiwall bags, etc.

With such a tremendous expansion in this direction has come a long predicted shortage of paper for container and corrugated materials derived from wood pulp, such as are required for a wide range of commodities. But judging from the record of experience gained in the history of acute shortages should we not look forward with confidence that American Industry will find the way and the means to overcome this problem. New technique in the packing of chips in digestors have already pointed the way to increased production.

And so we have seen the collapsible tin tube evolve to an inside coated-lead tube without tin and the intensive extension of the application of protective coatings in every direction. At this time an easier position in the supply of certain metals at least points toward the optimistic side.

Thus we have a brief summary of some of the high points of the changes and trends that have developed in the field of medicinal products since our entry into the war. Of greater importance perhaps than all that has preceded may be mentioned the development of Penicillin that has engaged the attention of so many research laboratories and hospitals to determine the value and scope of usage indicated for this most important material. What possibilities lie ahead in this new era of medicine are now being discovered and the limitations of therapeutic value will eventually be determined. And so we await with interest these developments.

Here's what you'll like about the new

...“HAGERTY HANDY FILLER”

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

Write for illustrated folder and prices

HAGERTY BROS. & CO.
10 Platt Street New York, N. Y.
Est. 1849

Procaine Hydrochloride U.S.P. XII
Procaine Base
Ethyl-Aminobenzoate U.S.P. XII
Butyl-Aminobenzoate U.S.P. XII
Iso-Butyl-Aminobenzoate
Phenacaine-Hydrochloride U.S.P. XII
Eucaine-Hydrochloride U.S.P. XII
Sodium Methyl Arsonate C.P.
Tetra-iodo-phenolphthalein Sodium U.S.P. XII

PUROCAINE CHEMICAL CO.,
INCORPORATED
Manufacturing Chemists
38th Ave. and 10th St., Long Island City, N.Y.

POWDERING THE FACE
vs.
FACING THE POWDER

With their boys at the front, American women have decided to maintain an equally inspiring front at home. They know instinctively that morale and munitions march side by side.

As the fighting front demands the highest quality in supplies, so those behind the lines select the best in cosmetics.

Kelton, for years, has supplied some of America's leading cosmetic houses,—is continuing and will continue to uphold their high standards.

We are privileged at this time to serve the U. S. Armed Forces and Defense Plants with special preparations.

•

KELTON
Cosmetic Company

230 West 17th Street, New York 11, N. Y.
819 Santee Street, Los Angeles 14, Calif.

• Lipstick • Eye Shadow • Rouge • Mascara • Powder, etc. •

GENUINE FRENCH PROCESS
ZINC OXIDE
For all Pharmaceutical, Cosmetic and Industrial Purposes

MEDICINAL GRADES:
"GOLD SEAL" U.S.P.
"FLUORESCENT SPECIAL" C.P.-U.S.P.

•

ZINC STEARATE
ZINC SULPHATE
ZINC CARBONATE

•

TARTARIC ACID U.S.P.
CITRIC ACID U.S.P.
LEMON OIL
MENTHOL

•

Essential Oils
Fine Chemicals
Aromatics
Drugs

BENDIX CHEMICAL CORPORATION
420 LEXINGTON AVE., NEW YORK 17, N. Y.
Phone: MUrray Hill 3-5821

Isopropyl and Ethyl

(Continued from page 629)

producer. This paper producer in this country actually undertook production of aclohol from these waste liquors in 1913, after buying the rights to the process from the Swedish owners in 1912. However, this producer soon found that while the process could be successfully operated in Sweden, it could not be successfully operated here because of the relatively low cost of blackstrap molasses from Cuba.

The waste sulfite liquors contain only two and one-half per cent of sugar, while blackstrap molasses contains fifty-two per cent of sugar. This plant which was operated in 1913 could not produce over 1,200 gallons of alcohol per day while the amount of waste sulfite liquors from which this alcohol was produced was somewhere between 100,000 and 200,000 gallons. Another difficulty in the process was that it was necessary to dilute the waste liquor five to one. The only way in which these liquors might be used is to mix them with molasses.

The quantities of waste sulfite liquor available would not improve the alcohol picture materially, it is stated by an authority on this process in this paper company. As a matter of fact, this paper company continued in the alcohol manufacture for many years after they had built an alcohol plant to make alcohol from the waste liquors, but they used molasses as a raw material Many years later they sold the plant, but subsequently it came back in their possession. Before Pearl Harbor, but when we were building large smokeless powder plants, and an alcohol shortage was in the offing because of this use alone, no one was interested in the use of this plant and it was subsequently dismantled.

An enormous amount of critical materials would be necessary for the erection of plants for the production of alcohol from these waste liquors and it is thought that the Government has no interest in allowing these critical materials to be diverted to any such use. For it is quite possible that by the time these plants were finally in operation, the need for them might have lessened or passed by entirely. The Government would rather use these critical materials for things that are more directly used in the war effort. They have no desire to erect these plants and then have them stand there as monuments to their stupidity.

A further reason why this paper company is not interested in the project is because it does not help them in the problem of disposing of these liquors without polluting streams and rivers. For after they have converted the sugar present in the liquors into alcohol, they still have the liquors on their hands for disposal. Under the present process of disposal of these liquors, so that the streams and rivers are not polluted, they obtain carbon which has become a very important by-product.

Post-War Reconversion

(*Continued from page 628*)

selves will have large inventories. Until these are marketed in an orderly fashion, return to normal business is hardly feasible. However, foreign demand, especially for medicines and a variety of important drugs, may be great and thus the inventory problem may be less than after the first World War when dumping of surpluses demoralized the drug market for a considerable period. An inventory problem also threatens in the shoe and leather industry but it may also be minimized by export or lend-lease demand."

Industrial Dermatitis

(*Continued from page 631*)

by weight, of the oil mixture. To prevent bacterial or mold growth, a 0.5 per cent solution of chlorobutanol is added.

Workers of the Public Health Service[16, 19] have also devised cleansers for soap- or alkali-sensitive employees. Thus a mixture that can be pressed into cakes of suitable size consists of:

Synthetic detergent	20
Hydrous wool fat	3
Colloidal clay	76
Perfume	1

A liquid soap substitute, one that makes a good cleanser and does not defat the skin, is a mixture of sulfonated castor oil having a pH of 7.2 and an oil content of 50 per cent, with 2 per cent of one of the synthetic wetting agents (e.g. Santomerse, Duponol or Igepon). The cleansing power of this mixture can be increased without materially increasing its irritating properties by adding 1 to 2 per cent of an alkali such as trisodium phosphate or sodium hexametaphosphate.

Protective clothes, if clean and properly designed, form another important means of preventing industrial dermatitis. Of interest in this connection are the potentialities of such new materials as pliofilm, koroseal, vinylite, resistoflex and cellophane in the production of protective garments for workers.[2] While on the subject, one cannot overlook the fact that certain types of protective clothes may cause dermatitis occasionally. Rubber gloves, for example, have been known to cause skin disorders.[20]

Although skin protective creams and ointments do not rate as high in some respects as do other measures, there is an apparent accelerated interest in this item. This fact is clearly evident in the technical and medical literature[1, 3, 8, 13, 15, 16, 21, 22, 23, 24, 25], as well as in the number of such products appearing on the market. As a matter of fact there are circumstances where skin protective creams offer the only means of protection against dermal irritants. Often gloves are unsuitable, especially in fine, skilled work, and tasks must be done

Manufacturers of
— AMERCHOL —
ABSORPTION BASES
for PHARMACEUTICAL and COSMETIC preparations

Our Absorption Bases possess inherent emollient and absorption properties because of their high free Cholesterol content.

- Facilitate the penetration and absorption of incorporated therapeutic agents.
- Recommended for ease of emulsification.
- Absorb unusually large amounts of water.
- Form pure white water-in-oil emulsions, completely stable under widely varied conditions.
- Form elegant products of rich texture and consistency.

We also manufacture—
Cholesterol C. P. • Emulsifiers • Ointment Bases • Industrial Penetrants • Softening and Dispersing Agents and other Amerchol products.

AMERCHOL products are manufactured from specially processed Cholesterol and other Sterols.

- Will not oxidize, nor turn rancid.
- Are unaffected by electrolytes.
- Retain their properties at extreme temperatures.
- Are for neutral, acid and alkaline creams, ointments and lotions.

American Cholesterol Products
Incorporated
MILLTOWN, NEW JERSEY
Sales Office—58 West 40th Street—New York 18, N. Y.

Expert Assistance in the Development of
WAR TIME PACKAGES
For **WAR MATERIALS**
For **CONSUMER ITEMS**
affected by Government orders covering packaging materials

W. C. *Ritchie* AND COMPANY
SET-UP PAPER BOXES · FIBRE CANS · TRANSPARENT PACKAGES
8820 BALTIMORE AVENUE • CHICAGO
NEW YORK · DETROIT · LOS ANGELES · ST. LOUIS · MINNEAPOLIS · DENVER · MIAMI

Imitation

Oak Moss
Clary Sage
Ylang Ylang

Seeley & Co., Inc.

136 Liberty St. New York 6, N. Y.

PRESERVATIVES

CHEMOSOL water soluble for solutions, ampuls, lotions

CHEMOGIN oil, alcohol, fat-soluble for creams, tinctures, ointments, lipsticks

CHEMOBEN brand of Sodium Benzoate U. S. P. powder

CHEMO PURO
MANUFACTURING CORP.
48th Avenue and 5th Street
LONG ISLAND CITY 1, N. Y.

with bare hands. As Schwartz[8] has observed, workers generally dislike wearing protective clothes but do seem to have a particular liking for the use of skin protective ointments.

When a protective ointment or cream is used, the worker applies it before starting on the job and the film on the skin affords a large measure of protection during the day. Immediately after work the film is washed off with soap and water and in so doing removes not only the ointment, but whatever irritants, dirt and grime that have accumulated during the day. This washing after work adds considerably to the protection offered by the cream itself.

While there are several so-called general purpose protective creams, it is well to remember that there is no single composition that will give efficient protection against all industrial skin irritants. However, it is felt that all protectives should have certain common qualities or standards.[8, 13, 16] These have been summarized quite concisely by the Committee on Industrial Dermatitis.[1] In the opinion of these authorities the minimal requirements of protective creams are: They must be of such consistency that they remain on the skin satisfactorily so as to provide adequate protection against contact irritants during work, they must be easy to apply before work and readily removed after work, and they must not themselves contain primary irritants or sensitizing substances.

As a result of their very thorough study of skin protectives, Klauder, Gross and Brown[15] developed nine formulas for such protective creams to meet a variety of conditions and materials found in industry. The first of these was a simple mixture of:

Petrolatum	70.0 per cent
Hydrogenated cotton seed oil	30.0 " "

The second, a modification of simple ointment, U.S.P. is prepared with:

White wax	5.0 per cent
Glyceryl monostearate	12.5 " "
Hydrous wool fat	5.0 " "
Sodium silicate, commercial solution	5.0 " "
Ammonium hydroxide, 10% solution	0.5 " "
Petrolatum	72.5 " "

If desired this formula can be modified by the addition of five per cent, by weight, of latex to produce a rubbery film on the skin.

Another in this series of compositions is one recommended where there is prolonged contact with water:

White wax	10.0 per cent
Hydrous wool fat	5.0 " "
Sulfonated olive oil	10.0 " "
Petrolatum	75.0 " "

Clean, nongreasy preparations that dry on the skin and do not rub off were also described. Indicated in dry work, these preparations offer protection against dust-born irritants or where soiling of the materials

or objects being handled is undesirable. One of these, a cream, is made from:

Glyceryl monostearate	12.0 per cent
White wax	12.0 " "
Wool fat	6.0 " "
Cholestrol	1.0 " "
Sodium silicate, commercial solution	5.0 " "
Ammonium hydroxide, 10% solution	0.5 " "
Water	63.5 " "

Materials which leave a resinous or cellulosic film on the skin also fell into this category. Applied with a brush or swab, these compounds have the disadvantage of not being entirely removed by washing; acetone, followed by the use of an emollient, being required for complete removal of the film. A typical product of this type is as follows:

Ethyl cellulose	5.0 per cent
Mastic	8.0 " "
Castor oil	1.0 " "
Acetone	86.0 " "

The last formula described by these investigators is a thick paste that leaves a waterproof, impervious covering on the skin. While affording more protection than any of the other combinations, it has the disadvantage of being somewhat sticky and of soiling objects. Hence it is suitable in only certain types of work. Quite simple in its composition, the product is a mixture of:

Zinc oxide	25.0 per cent
Kaolin	25.0 " "
White petrolatum	50.0 " "

More recently, Schwartz[16] divided skin protectives into six basic types; these types and their combinations being the basis for most commercial products. In his report, he not only gave a brief description of the action and indications for each category, but included an illustrative formula for each as well:

1. A simple vanishing cream, which when rubbed into the skin, fills the pores with soap and facilitates the removal of dirt and soil when washing after work; e.g.:

Stearic acid	20
Sodium carbonate	2
Glycerine	6
Water	78

2. Ointments, emulsions or solutions of the "invisible glove" type, of either a water soluble or water insoluble nature, that leave a thin protective film of resin or wax on the skin. Because of the tendency of perspiration to accumulate under the water soluble films and cause loosening or flaking, fats or oils may be added. A type formula of the water-soluble compositions is:

Acacia	5
Tragacanth	5
Borax	2
Water	88

falba
Reg. U. S. and Foreign Countries
The Heart of LANOLIN
THE ORIGINAL ABSORPTION BASE
Write for booklet
Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

COLA COLORS
Certified by the U. S. Dept. of Agriculture
To take the place of
SUGAR COLOR
Send for samples and prices
Eastern Representative of Wm. J. Stange Co., Chicago, Ill.
LEEBEN CHEMICAL CO., Inc.
389 Washington St., New York, Tel.: WAlker 5-0210, 0211

TL Beeswax
● PURE WHITE
● EXTRA QUALITY
● ABSOLUTELY PURE
● ABOVE U.S.P. STANDARDS
● Samples will gladly be sent on request—at no obligation.
Serving The Trade For 91 Years
THEODOR LEONHARD WAX CO., INC.
HALEDON, PATERSON NEW JERSEY
Western Distributor: A. C. Drury & Co., 219 E. North Water St., Chicago, Ill.

BUY WITH CONFIDENCE GET WITH No DELAY
1—Stokes Comb. 79-80 Tube Filler, Clipless closer.
2—World Rotary Automatic Labeling Machines.
1—Burt straight line duplex Automatic Labeler.
3—World, 1-Ermold semi-automatic Labeling Machines
1—Pneumatic Scale Powder Filler and Capper, Unit complete
2—K.K. 72-spout Bottle Washers, m.d.
8—Monel open tanks, 25 gal.: 9, 45 gal.
5—Dry Powder Mixers, from 50 to 2000 lbs.
25—Aluminum, Copper, Glass lined, jacketed and agitated Kettles.
1—Abbe Blutergess Sifter No. 2
2—Colton No. 3 Toggle Presses
3—Stokes Steam Water Stills, 5, 10, 25 gal. per hour.
We buy and sell from a Single Item to a Complete Plant
CONSOLIDATED PRODUCTS CO., INC.
20-21 Park Row, New York, N. Y. Shops: 335 Doremus Ave., Newark N. J.

AMPULS
of
Iron Cacodylate
and
Compounds
Facilities for large production
New List Now Available
Protected Territories open for Exclusive Distributors
TORIGIAN LABORATORIES, INC.
QUEENS VILLAGE, N.Y.

A Perfected
HAIR LACQUER BASE
FOR MANUFACTURERS
Semi-liquid form. Needs only alcohol, ethyl or isopropyl, water and odor. Isopropyl mask already incorporated. Complete instructions furnished. Makes clear, fast-drying, non-clogging, crisp lacquer of highest type. No filtering necessary. Free sample.
COLLINS LABORATORIES, Inc.
5003 DELMAR BLVD. - ST. LOUIS, MO.

HORM FILTER PADS
• FOR PREFILTRATION CLARIFYING
AVAILABLE IN 7 POROSITIES
• FOR FINAL BACTERIAL FILTRATION
5 GRADES OF STERILIZING FILTER PADS
VARIOUS types of filter pads including loose asbestos filtering medium are carried in stock for prompt shipment.
Special filter media for special problems can be furnished on request.
CLARIFYING GRADES DS, DO, D-1, D-2, D-3, D-4, D-5
Sterilizing grades: D-6, D-7, D-8, D-9, D-10
F. R. HORMANN & CO., INC. Equipment Engineers
127 Boerum Place Brooklyn, N. Y.
FILTERS TANKS MIXERS FILLERS

SHEET METAL GOODS
SPRINKLER TOPS
CORK TOPS DOSE CAPS
CONSOLIDATED
FRUIT JAR COMPANY
NEW BRUNSWICK, N. J.

Water insoluble resins or waxes require a volatile solvent for application and have the disadvantage of requiring a special solvent for their removal, either of which may irritate the skin after frequent use. This possible irritant effect may be minimized, however, by applying a hydrous wool fat cream after work. A formula of this type is:

Gum benzoin	5
Beeswax	2
Anhydrous wool fat	5
Ethyl alcohol	88

The water soluble films offer some protection against organic solvents, while the water-insoluble coatings help to keep out water soluble irritants. Both types may be employed on the face and offer good protection when masks or respirators are worn.

3. Ointments that fill the pores with a harmless fat to protect the skin against water soluble irritants, petroleum oils, greases and coal tar derivatives; e.g.:

Anhydrous wool fat	70
Castor oil	30
Perfume	sufficient

Since such products are not so readily amenable to the action of soap and water, wetting agents may be added to facilitate their removal.

4. Protective ointments containing non-irritating chemicals to neutralize industrial irritants. For example, boric acid and benzoic acid are recommended to neutralize industrial alkali, soaps and magnesium hydroxide to neutralize industrial acids, and nonirritating oxidizers (e.g. dichloramine T) to detoxify vesicant gases. A typical formula contains:

Magnesium carbonate	5
Talc	5
Soap	30
Hydrous wool fat	30
Castor oil	28
Duponol	2
Perfume	sufficient

5. Protective ointments which permit inert powders to adhere to the skin to form a protective covering. Recommended for exposures to allergenic substances such as chemical used in explosives manufacture, and for protection against the mechanical irritation of abrasives, etc., such a composition can be made from:

Zinc oxide	5
Talc	5
Iron oxide	1
Irish moss	2
Gum benzoin	2
Water	10
Alcohol	15
Vanishing cream	60

6. Protective applications against photosensitizing agents, such as heavy coal tar and oil distillates, and

against excessive sunshine. These products may contain physical light screens, as in the following example:

Hydrous wool fat	58
Castor oil	30
Titanium dioxide	5
Menthyl salicylate	5
Duponol	2
Perfume	sufficient

Other formulas for skin protectives have appeared in the literature. Thus for skin protectives of the so-called general type, Tyler[25] suggests one that might be useful to protect the hand of factory and machine shop workers, or the like, from ordinary imbedded grease or grime:

Stearic acid	12 parts
Lanolin	3 "
Glycerine	6 "
Potash soap (40%)	5 "
Magnesium stearate	10 "
Water	50 "

Protective creams to meet specific industrial requisites often require the modification of standard products. For example, Reuter[3] prepared the following vanishing cream type to protect the skin of female hosiery workers handling silk wet with a highly alkaline solution:

Lanolin, refined	9.0
Stearic acid	50.0
Triethanolamine	2.7
Carbitol	18.0
Saturated solution of boric acid	120.0

As has been indicated, emollients are sometimes required to overcome the irritating effects of solvents for removing certain types of skin protectives. It has also been found that the use of an emollient preparation is also beneficial in winter at the end of the work day. Many suitable preparations are available for this purpose, but Klauder and his coworkers[15] advise equal parts of hydrous wool fat and olive oil, cottonseed oil or neat's foot oil.

BIBLIOGRAPHY

1. Committee on Occupational Dermatoses: J.A.M.A. 122:370, 1943.
2. Schwartz, L.: J.A.M.A. 111:1523, 1938.
3. Reuter, M. J.: Ind. Med. 10:147. 1941.
4. Davis, P. A.: Ohio State M. J. 39:337, 1943.
5. Hayhurst E. R.: Ind. Med. 12:443, 1943.
6. Goldblatt, M. W.: Bull. War Med. 2:528, 1942.
7. Orecklin, L.: Med. World 59:277, 1941.
8. Schwartz, L.: N. Y. State J. M. 42:1525, 1942.
9. Schwartz, L. & Tulipan, L.: "Occupational Diseases of the Skin," Philadelphia, Lea & Febiger, 1939, pp. 31-2, 36.
10. Leggo, C.: Ind. Med. 12:102, 1943.
11. Schwartz, L.: Ind. Med. 11:228, 1942.
12. Downing, J. G.: Am. J. Nursing 43:332. 1943.
13. Mooney, T. F.: Ind. Med. 11:191, 1942.
14. Lane, C. G. & Blank, I. H.: J.A.M.A. 118:804, 1942.
15. Klauder, J. V., Gross, E. R. & Brown, H.: Arch. Derm. & Syphil. 41:331, 1940.
16. Schwartz, L.: Med. Clinics No. Am. 26:1195, 1942.
17. Blank, I. H.: Arch. Derm. & Syphil. 39:821, 1939.
18. Lane, C. G. & Blank, I. H.: Arch. Derm. & Syphil. 43: 435, 1941.
19. Schwartz, L.: Public Health Reports 56:1788, 1941; Ind. Med. 10:493, 1941.
20. Burgess, J. F.: Canadian M.A.J. 45:222, 1941.
21. Lesser, M. A.: Drug & Cosmetic Ind. 46:284, 1940.
22. Kalish, J.: Drug & Cosmetic Ind. 51:279, 1942.
23. Spease, E.: N.A.R.D. Jour. July 19, 1943, p. 1128.
24. Sedgewick, F. H.: S.P.C. 15:419, 1942.
25. Tyler, C. A.: Soap & Sanit. Chem. 18:19, Sept. 1942.

EXCLUSIVE
PRIVATE BRAND
COSMETICS

COSMIA

COSMIA LABORATORIES
95 MADISON AVENUE
NEW YORK 16, N. Y.

COMPAGNIE DUVAL

MENTHOL SYNTHETIC LIQUID
(not U.S.P.)
Samples and prices upon request
Philadelphia Representative: Cutler Chemical Co.
Merion Gardens, City Line and Wynnewood Road, Merion, Pa.
COMPAGNIE DUVAL
121-123 East 24th St. New York

MOULDS
for
LIPSTICKS
MASCARO
SUPPOSITORIES
STYPTIC PENCILS
and DIES for ROUGE
COMPACT POWDER
Write for Catalog
A. CAVALLA, INC. 163 W. 18TH ST. NEW YORK

GUMS
ARABIC KARAYA TRAGACANTH
QUINCE SEED GALL NUTS
D. S. DALLAL, 261 Fifth Ave., New York 16
IMPORT MUrray Hill 3-0452 EXPORT

Professional Service

THE COLUMBUS LABORATORIES
Analytical and Consulting Chemists
Bacteriologists

We have been solving problems pertaining to foods, drugs and cosmetics since 1893.

33 N. STATE ST. CHICAGO, ILL.

H. A. Seil, Ph.D. E. B. Putt, Ph.C., B. Sc.

SEIL, PUTT & RUSBY, Inc.

Analytical and Consulting Chemists
Formerly Experts for U. S. Dept. of Agriculture

Analyses Made — Formulas Developed
Research Investigations Conducted

Specialists in the Analysis of

Beverages	Essential Oils
Flavoring Extracts	Toilet Preparations
Foods — Spices	Drugs
Proprietary Medicines	Special Formulas

Pyrethrum, Rotenone and other Organic Insecticides

Lab's: 16 East 34th St. New York, N. Y.
Telephone MUrray Hill 3-6368

Classified

Machinery for Sale

Complete line of rebuilt, guaranteed machinery. See detailed announcement on Page 703 of Consolidated Products Co., 20-21 Park Row, New York City.

GUARANTEED REBUILT Cosmetic and Chemical Equipment: 40 gal. Ross Pony Mixer; 50 gal. Monel Jktd. Kettle; Pfaudler 100 gal. glass lined; fully Jktd. Kettle. FIRST MACHINERY CORP. 819-837 E. 9th St., New York.

FOR SALE: Complete Colton Pill Plant; Colton Toggle Presses; Stokes Suppository Machine; Tube and Jar Fillers; Stokes and Smith Powder Fillers; Powder Mixer, 50 to 2000 lb.; Rotex Sifters; Coating Pans; Pulverizers; Pumps; Packaging Equipment; Tablet Machines; Labelers; Glass Lined Tanks; Copper Kettles, etc. Send for bulletins. BRILL EQUIPMENT COMPANY, 183 Varick St., New York 14, N. Y.

FOR SALE: 6—Colton & Stokes Tablet Machines, ¼" to ¾"; Pfaudler 350 gal. Glass Lined Tank; 2—Pfaudler 500 gal. Stainless Steel Lined, Jacketed, Agitated Kettles; W & P Jack. Mixer 150 gals.; Double Spiral Mixer 150 gal.; Paste, Powder & Liquid Mixers; Filling Machinery; Kettles and Tanks; Grinders, Crushers & Pulverizers; Sifters & Screens; Pebble & Jar Mills; Stills & Columns; Filters & Filter Presses; Dryers, Centrifuges; Pumps; Bottle Washers. Send us your inquiries. We buy your surplus equipment. Stein Equipment Co., 426 Broome St., New York 13, N. Y.

Classified

Machinery for Sale

FOUR stainless steel tanks, each 225 gallon capacity, gas-fired, practically new. Box 495, DRUG & COSMETIC INDUSTRY.

CONVEYORS, DRYERS, FILLERS: Liquid powder, tube; Filters, Kettles, Labelers, Mills, Mixers, Coating Pans, Percolators, Sifters. Tablet Machines, Tanks, etc. Send us your inquiries and a list of your idle equipment. Loeb Equipment Supply Co., 912 North Marshfield Ave., Chicago 22, Ill.

FOR SALE: 2—5/8" & ¾" Tablet Machines; Pfaudler 350 gal. Glass Lined Tank; 2—Pfaudler 500 gal. Stainless Steel Lined Agitated, Jack. Kettles; 6—New Ball & Jewell Rotary Cutters Size 0 Premier; Copper Jack. Kettles 15 to 150 gal.; Homogenizer, 5 HP motor; W. & P. Jack. Mixer 150 gals.; Double Spiral Mixer 150 gal.; Paste, Powder & Liquid Mixers; Filling Machinery; Kettles and Tanks; Grinders, Crushers & Pulverizers; Sifters & Screens; Pebble & Jar Mills; Stills & Columns; Filters & Filter Presses; Dryers; Centrifuges; Pumps. Send us your inquiries. We buy your surplus equipment. Stein Equipment Company, 426 Broome St., New York 13, N. Y.

4—Pneumatic Scale Duplex Straight Line Labelers
6—New 60 Gal. Stainless Steel Tanks With Stands & Covers
2—Attrition Mills (Robinson & Waldron) 10 & 15 HP Motors
4—Cast Iron Receiving Tanks 3'6" Dia. x 4'6" High, 3/8" Thick (300 Gal. Cap.)
2—Gould Stainless Steel Centrifugal Pumps, 4" x 3", 9 3/8" Impeller.
18—New Cypress Wood Closed Pressure Storage Tanks (Round & Tapered) 19,220-22,630 Gal. Cap.
17—Copper Coils 1½" Dia.-6" Dia., Various Turns & Lengths.
7—Cast Iron Kettles (Jacketed) 50-75 Gal. Cap.
1—J. H. Day No. 000 Ointment Mill.
2—C. Ross Paste Mixers, 34" x 20", 70 Gal. Cap.
9—J. H. Day Heavy Duty Agitator Mixers (Tilting Type).
30—Copper Tanks, 15-500 Gal. Cap.
Also Extractors, Pot Stills, Filters, Condensers, Centrifugal Pumps (all sizes). Write for Latest Stock List. PERRY EQUIPMENT & SUPPLY CO., 1515 W. Thompson St., Phila. 21, Pa.

FOR SALE—1 used 5 gal. Barnstead Still
1 used 2½ gal. Stokes Still
Fidelity Laboratories, 220 N. St. Clair St., Dayton, Ohio.

Machinery Wanted

WANTED—Capsule Filling Machine, automatic or semi-automatic, for No. 1 hard gelatin capsules. Fidelity Laboratories, 220 N. St. Clair St., Dayton, Ohio.

SALES REPRESENTATION

Capable, thorough and frequent coverage of toilet goods outlets, on commission or fee basis. We invite investigation.

MERZ-MIHM, 38 W. 32nd St., New York, N. Y., or 567 E. Illinois St., Chicago, Ill.

New Type Sales Representation

New York Metropolitan area. Straight commission—no extras, no advances. Well established drug or cosmetic house only. Unusual promotional set up. For details, write

WILLIAM IRVING HAMILTON, Inc., 267 Fifth Ave., New York 16, N. Y.

Rates—All classifications $1.00 an issue for 20 words or less; additional words 5c each.

Payment must accompany order. Add 10 cents if replies are to come to a box number and be forwarded.

Classified

Help Wanted

MANUFACTURER of Permanent wave supplies desires consultant chemist with experience. Reply giving all details in first letter. Information strictly confidential. Box 487, DRUG & COSMETC INDUSTRY.

MALE CHEMIST Wanted For Cosmetic Plant. Familiar with modern formulation, and experienced in methods of manufacturing creams, lotions and powders. Should also be good organizer with ability to assist Production Manager in handling plant problems. Opportunity for the right man in a well-known cosmetic house. Box 496, DRUG & COSMETIC INDUSTRY.

WANTED: Man experienced in filling and handling of ampuls under aseptic conditions and capable of assuming charge of large-scale operation. Excellent opportunity for right man. Location New York City. In replying give all pertinent data and enclose recent photograph. Box 497, DRUG & COSMETIC INDUSTRY.

COSMETIC TECHNICIAN, male or female, wanted by manufacturer of cosmetic raw material. Should have broad experience in formulating and manufacturing modern cosmetics of all types, and able to develop practical formulas for new cosmetics incorporating absorption base, modern emulsifiers, wetting agents, sun screens, etc. Chemical education desirable although not essential. Write in detail regarding education, experience, salary requirements, etc. Box 498, DRUG & COSMETIC INDUSTRY.

Situations Wanted

CHEMIST EXECUTIVE: Graduate Chemist, 38, draft status 3 A-H with 17 years industrial engineering experience. Capable assuming all responsibility on inside of manufacturing organization including purchasing, equipment, and layout, costs, production, personnel, etc. A key man for a manufacturer whose sales volume is in excess of $500,000. Box 475, DRUG & COSMETIC INDUSTRY.

CHEMIST-PERFUMER, 48, now in charge of perfume compounding department in well-known firm desires a change of position. Speaks French. Box 499, DRUG & COSMETIC INDUSTRY.

Business Opportunities

PRIVATE Label House Requires Mid-west and Western Territory Representatives. Box 500, DRUG & COSMETIC INDUSTRY.

AVAILABLE

A patent-protected Liquid Dentifrice. An advertising story that can't be beat . . . A scientific background of five years research.

FIRST ON THE MARKET • SALES-TESTED

The owners of the patent and trade-mark are in the armed forces. Unable to develop the product. No priorities involved. The owners are willing to *give* the product to a responsible concern for examination and tests. Low royalty basis is ultimate status desired. Box 501, DRUG & COSMETIC INDUSTRY.

VOLCLAY BC MICRON BENTONITE

BENTONITE

BC VOLCLAY is colloidal bentonite in its purest form—a soft, impalpable, grit-free powder.

Sample on request

AMERICAN COLLOID COMPANY

363 W. Superior Street • CHICAGO, ILLINOIS

CERTIFIED COSMETIC COLORS

Also

COSMETIC Inorganic Pigments

SUBMIT YOUR INQUIRIES

INTERSTATE COLOR CO., INC.

7 Beekman Street New York City

PURITY

FILCO FILTER PAPERS

The high standard of Purity essential to your filtration operations has been our goal in the production of FILCO FILTER PAPERS.
Rely on FILCO for all your filtering needs . . . our filtration engineers will be glad to aid you in economical procedures.

Write for Information and Free Samples.

THE FILTER PAPER CO. 53 East 24th Street Chicago, Illinois

FOLDING CARTONS DISPLAY CONTAINERS

OUR 40th ANNIVERSARY

Empire BOX CORPORATION

Offices: Garfield, N. J., and Palmolive Building, Chicago.
Factories: Garfield, N. J., & South Bend, Ind. Mills: Stroudsburg, Pa.

BENZOCAINE

(Ethyl Amino Benzoate)

U. S. P.

CRYSTALS and POWDER

SEYDEL

New comprehensive leaflet just off the press.
Available on Request.

SEYDEL CHEMICAL CO.

ESTABLISHED 1904 JERSEY CITY, N. J.

For Butter Type Flavors

Acetyl Methyl Carbinol (Acetoin)
Acetyl Propionyl
Diacetyl

For Pineapple Imitations

Allyl Caproate Allyl Tiglate
Allyl Heptylate

FAIRMOUNT CHEMICAL CO., Inc.

Manufacturers of Flavor and Perfume Chemicals
600 Ferry Street NEWARK, N. J.

★

As a service to our subscribers who may not find a bookstore convenient we offer for sale any book published in the United States at regular publisher's price.

DRUG AND COSMETIC INDUSTRY
101 W. 31st Street New York, N. Y.

FEATHER MASCARA BRUSH

Actual Size - - Patent Pending

Two Sides Usable . . . One to apply . . . one to adjust mascara

Immediate Delivery

J. LESHIN

565 - 5th Avenue, New York 17, N. Y.
Plaza 8- 0328
Chicago Representative: S. Broder, 32 N. State St.

STEARATES

ZINC STEARATE
CALCIUM STEARATE
ALUMINUM STEARATE
MAGNESIUM STEARATE

STEARATE OF MAGNESIUM

Light, Great Adhesiveness. Pure White, Immeasurable Fineness. Heavy if desired. Dusts out under the puff like the finest pollen. Made to satisfy most exacting requirements.

Prompt Shipments in any quantity
Write for samples and prices

STOCKS CARRIED: Chicago, St. Louis, San Francisco, Los Angeles, Kansas City, Mo., Philadelphia, Shawnee, Oklahoma.

STEARATE OF ZINC

Odorless, Impalpable. Pure White. Water Resisting. Great Adhesiveness. Light or Heavy as desired. Highest standard of Purity and Uniformity.

FRANKS CHEMICAL PRODUCTS CO., INC.

55 — 33RD STREET BROOKLYN, N.Y.
BUSH TERMINAL BLDG. NO. 9

{Index to Advertisers}

Abbott Laboratories....690
Allied Products, Inc....592
Aluminum Seal Co....Insert facing 613
American Cholesterol Products, Inc....701
American Colloid Co....707
Anchor-Hocking Glass Corp....593
Andresen, J. C....675
Armstrong Cork Co....609
Atlas Powder Co....602

Baker Chemical Co., J. T....Insert facing 652
Bendix Chemical Corp....700
Bridgeport Metal Goods Mfg. Co....672
Broder, Harry, Inc....600
Brown Bag Filling Machine Co....683
Bush & Co., W. J....692

Calco Chemical Co., Inc....656
California Fruit Growers Exchange....Insert facing 660, 688
Carbide & Carbon Chemical Corp....597
Carr-Lowrey Glass Co....610
Cavalla, Inc., A....705
Chemo-Puro Mfg. Corp....702
Chiris Co., Inc., Antoine....615
Chrystal & Co., Inc., Chas. B....692
Collins Labs....704
Colton Co., Arthur....686
Commercial Solvents Corp....611
Consolidated Fruit Jar Co....704
Consolidated Products Co., Inc....703
Cosmia Laboratories....705
Crown Cork & Seal Co....604

Dallal, D. S....705
Distributing & Trading Co....698
Dodge & Olcott Co....Insert facing 620
Dow Chemical Co....650
Drury & Co., Inc., A. C....Insert facing 653
Duche & Sons, Inc., T. M....690
du Pont de Nemours & Co., Inc., E. I....616
Durlin Corp....678
Duval Compagnie....705

Economic Machinery Co....697
Emery Industries, Inc....606
Empire Box Corp....707
Eppenbach, Inc....670
Ertel Engineering Corp....670
Evans Chemetics, Inc....Insert facing 668

Fairmount Chemical Co....707
Felton Chemical Co., Inc....Insert facing 604
Filter Paper Co....707
Fine Organics, Inc....692
Firmenich & Co., Inc....Insert between 596, 597
Florasynth Labs., Inc....613
Forster Co., Rene....683
Frank-Vliet Co....650
Franks Chemical Prod. Co., Inc....708
Fritzsche Bros....Insert between 676, 677

Gardner-Richardson Co....Insert facing 661
General Drug Co....Insert facing 612
General Electric Co....612
Gesell, Inc., R....690
Givaudan-Delawanna, Inc....Insert between 604, 605
Goldschmidt Chem. Corp....Insert facing 669
Greeff & Co., R. W....696

Hagerty Bros. & Co....699
Helfrich Labs, Inc....Insert between 652, 653
Heyden Chemical Corp....Insert facing 605
Hopkins & Co., J. L....678
Hormann & Co., F. R....704
Horn, John....688
Huisking & Co., Inc., Chas. L....686

Illinois Water Treatment Co....674
Industrial Chemical Sales....Cover 2
Inland Alkaloid Co....688
Innis-Speiden Co....675
Interstate Color Co., Inc....707

Jelly & Co., Walter H....696

Kachurin Drug Co....680
Kelton Cosmetic Co....700
Kimble Glass Co....Insert facing 596
Kohnstamm & Co., H....Insert between 612, 613
Kolmar Laboratories....646

Leeben Chemical Co., Inc....703
Lemke, Co., B. L....694
Leonhard Wax Co., Th....703
Leshin, J....707
Lueders & Co., George....Insert between 612, 613
Lusteroid Container Co....674

Magna Mfg. Co., Inc....620
Magnus, Mabee & Reynard, Inc....618
Mallinckrodt Chemical Wks....Insert facing 621
Malmstrom & Co., N. I....596
Maryland Glass Corp....Insert between 596, 597
McKesson & Robbins, Inc....698
Merck & Co., Inc....607
Meyercord Co., The....640
Monsanto Chemical Co....642

National Aniline & Chemical Co....656
National Can Co....594, 595
Naugatuck Aromatics....589
New England Collapsible Tube Co....638
N. J. Machine Corp....657
N. Y. Quinine & Chemical Works....614
Norda Essential Oil & Chemical Co....608
Northwestern Chem. Co....660

Orbis Products Corp....644
Owens-Illinois Glass Co....603
Oxzyn Company....619

Package Machinery Co....664
Parento Co., Compagnie....663
Parsons Imports, M. W....680
Penick & Co., S. B....Insert between 668, 669
Pennsylvania Refining Co....598
Pfaltz & Bauer Co., Inc....703
Pfizer & Co., Inc., Chas....Cover 4
Pittsburgh Lectrodryer Corp....668
Polak & Schwarz, Inc....599
Powell & Co., Inc., John....654
Purecaine Chemical Co....699

Ritchie & Co., W. C....701
Robinson Wagner Co....684
Rosenthal Co., H. H....688

Schimmel & Co., Inc....601
Seeley & Co., Inc....702
Seydel Chemical Co....707
Sherwood Refining Co....658
Solvay Sales Corp....682
Sonneborn Sons, Inc., L....605
Standard Alcohol Company....658
Standard Oil Co. (Indiana)....591
Stokes Machine Co., F. J....666
Sturge Ltd., John & E....Insert facing 597
Swindell Bros., Inc....617
Thurston & Braidich....694
Tombarel Products Corp....Insert between 668, 669
Torigian Labs., Inc....704
Ungerer & Co., Inc....Cover 3
U. S. Bottlers Machinery Co....682
U. S. Industrial Chemicals, Inc....Insert between 648, 649
van-Ameringen-Haebler, Inc....Insert between 620, 621
Van Dyk & Co....694
Verley & Co., Albert....Insert between 644, 645

Wahlert Products Corp....672
Welch, Holme & Clark, Inc....660
Whittaker, Clark & Daniels, Inc....684
Will & Baumer Candle Co....654
Wilson Laboratories, Inc....692
Wolf & Co., Jacques....683